DOCUMENT RESUME

ED 211 501	SE 019 337

AUTHOR	Cohen, Elizabeth G.
TITLE	Teacher Application Pamphlet: Designing Change for the Classroom. Final Report. Status Equalization Project: Changing Expectations in the Integrated Classroom.
INSTITUTION	Stanford Univ., Calif. Center for Educational Research at Stanford.
SPONS AGENCY	National Inst. of Education (ED), Washington, D.C.
PUB DATE	Jun 80
GRANT	OB-NIE-G-78-0212-(P-4)
NOTE	219p.
EDRS PRICE	MF01/PC09 Plus Postage.
DESCRIPTORS	Bias; *Classroom Environment; Curriculum Design; Elementary Education; Expectation; Group Activities; Group Dynamics; *Grouping (Instructional Purposes); Minority Group Children; Program Evaluation; *School Desegregation; *Small Group Instruction; *Socioeconomic Status; Status Need; Student Behavior; *Teaching Methods

ABSTRACT

This report is based on the results of a field experiment in three racially integrated elementary schools. The study reports that groupwork is an effective strategy to produce equal status behavior among racial groups of different socioeconomic background and different levels of academic skills. It also reports that small groups are of critical importance to special classroom settings such as the desegregated classroom. The study includes: (1) theoretical rationale for using small groups to create more successful learning experiences for students with low expectations for academic competence; (2) directions on how to train children in small group behavior and specific activities to be used during training; (3) data on adaptation of one's regular curriculum to the small group mode; and (4) evaluation data. A list of references is appended. (Author/JD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED211501

"Teacher Application Pamphlet: Designing Change for the Classroom"

Final Report

Status Equalization Project: Changing Expectations in the Integrated Classroom

National Institute of Education Grant No. OB-NIE-G-78-0212 (P-4)

by

Elizabeth G. Cohen
Stanford University

June 30, 1980

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.
☑ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

SP 019 337

Table of Contents

Page

Chapter I For Teachers: Using General Principles Instead of Recipes 1

Chapter II Groupwork and Teaching Objectives 6

Chapter III The Dilemma of Groupwork 16

Chapter V Treating Expectations 36

Chapter IV Designing the Social Situation 51

Chapter VI New Norms for Collective Tasks 62

Chapter VII Giving Roles to Group Members 88

Chapter VIII Groupwork in the Desegregated Setting 108

Chapter IX A Design for Groupwork in Integrated Classrooms . . . 119

Chapter X The Multi-Ability Classroom 167

References 192

Appendices 197

Figures Chapter IX

		Page
Figure I	Sample Guide for Observing Teacher	126,127
Figure II	Sample Student Questionnaire and Analysis Guide for the Questionnaires	129, 130, 131, 132
Figure III	Samples of Interaction Scoring Sheet and Calculations	136, 137
Figure IV	The Four-Stage Rocket and Observer Sheet	142,143
Figure V	Improving Group Process Skills	144
	Work Behaviors	145
	Small Group-Helping Behaviors	146
	Troublesome Behaviors	147
	Small Group Observation Sheet	148
Figure VI	Memo - Suggestions for Use of Student Leaders and Student Observers	150,151
Figure VII	Small Group Discussion and	154
	Presentation of the Task - "Money for Sandra"	155
	Observer Role	156
	The Morale Dilemma	157
Figure VII	Design of Systematic Small Group Evaluation	158

Figures Chapter X

		Page
Figure I	Social System of the Classroom	172
Figure II	Evaluation in the Classroom Social System	174

Tables Chapter IX

		Page
Table 1	Average Percentage of Initiation by Students in Small Groups, According to Reading Ability and Treatment Condition (Excluding the Facilitators)	159
Table 2	Average Number of Cooperative Acts per Group for Treated and Untreated Classrooms (Positive Evaluations plus "Action Opportunities")	160
Table 3	Treatment and Probability of Chosing "The Group" as Having the Best Ideas	160
Table 4	Average Number of Reasoning Scores per Group (Treated versus Untreated) in a 15 Minute Small Group Interaction Session	161
Table 5	Students' Relative Influence Measured by the Percentage of Choices Given to Students as Having the Best Ideas in the Solution of the Small Group Task (Within Reading Ability and Treatment Condition)	163

Tables Chapter X

		Page
Table 1	Proportion of Time Individual Students Were Observed in Various Activities and Groupings by In-Service Treatment	181
Table 2	Academic Interaction with Other Students: Acts per Minute for Observations of Various Grouping Size/Activity Types	182

APPENDICES

		Page
Appendix A	Small Group Tasks	197

Chapter I

For Teachers: Using General Principles Instead of Recipes

This is a book for teachers of students of all ages. Specifically, this book speaks to those teachers who believe that the kind of learning which takes place when students talk, explain and argue is different from learning when students listen to what the teacher is saying, when students give public recitations and when they sit and work on papers and exercises by themselves. If a teacher wants to produce active learning, properly designed work in groups is a powerful tool for providing simultaneous opportunities for all class members.

Groupwork is an effective strategy for a variety of other objectives. Small groups are of critical importance to special classroom settings such as the desegregated classroom where talking together about tasks enables students to use each other as valuable resources and to discover that students coming from different backgrounds have something worthwhile to contribute to the group endeavor. Being able to ask questions and discuss problems with fellow students in an articulate, reasonable and responsive manner is another objective. Skills for working in groups have many applications in student and adult work life. Small groups are an excellent method of "coopting" poor achievers into active effort and engagement with their academic tasks.

Small groups are not a panacea for instructional problems. They are only one tool, useful for specific kinds of objectives in the classroom. Most teachers will want to use them in combination with a variety of other classroom formats for differing kinds of tasks and objectives. The choice of small groups as a strategy should depend upon the instructor's objective and the kind of learning experience necessary to achieve those objectives.

What is Groupwork?

When students work together in a group small enough so that everyone can participate on a task which has been clearly assigned and where students are expected to carry out their task without direct and immediate supervision by the teacher, we have what this book calls "groupwork." Groupwork is not the same as ability grouping in which the teacher divides up the class by academic criteria so that he/she can instruct a more homogeneous group. It should also be distinguished from small groups which the teacher composes for intensive instruction, such as flexible grouping procedures used in individualized reading instruction.

The question of who is in charge of the group is critical; if a teacher is in charge, regardless of the age of the students, the teacher will do much more talking than the students. The teacher's evaluations of each member's performance will have far more weight than any other group member's evaluation. If the teacher is in charge, members will talk, not to each other, but to the teacher as the authority figure who is overseeing the intellectual performance of the members. Group members will want to know what the teacher expects in the way of a satisfactory performance and will be more interested in obtaining feedback on the performance from the teacher than from any other group member.

Supervised group instruction is the ideal learning situation for many objectives. For example, if students are just learning new difficult technical skills, they may need close supervision to prevent them from making mistakes on their initial attempts at performance. Another example is remedial reading, where students need maximum feedback, structuring, and encouragement (Stallings, 1978).

In contrast to this situation, the groupwork I am talking about involves an explicit delegation of authority to the students; it is their job to carry out the task. The instructor should provide them with clear instructions on how they are to go about doing this task, but they must take over the job of suggesting what other members should do, listening to what other people are saying, and deciding how to get the job done within the time and resource limitations set by the instructor. A key feature of groups is their interdependence; to some degree members need each other in order to complete the task. Interdependence is a strong source of motivation for participation in a group; at the same time it is the source of a whole series of problems for groups. I will give the topic of interdependence a thorough analysis.

Use of General Principles

Contrary to what most practitioners believe, there is nothing so practical as a good theory. Sociologists and social psychologists have useful theories and relevant research on small groups in laboratory and classroom settings. From this theory and research come some general principles applicable to the instructor's own situation. Using these principles, an instructor can analyze his/her own class and learning objectives in order to design a suitable small group format. Instead of "recipes," I will present general principles and concepts combined with practicable, workable examples. These same general principles suggest ways to evaluate the success of the technique so that the instructor can decide whether it works for his/her class and if so, how to improve it for the next time.

The advantage of providing general principles is that the teacher can use them in settings ranging from elementary to college level and to non-formal education. The instructor makes various adjustments for differences in age of the student and in the nature of the setting. For example, the simplicity of the instructions will vary with the age of the students. So will the analysis of what skills are already possessed by group members in comparison to what they will need for the group task. It is clear that in younger groups, there are potential problems of discipline and classroom management which are absent for older groups. Not all the analysis and adjustment focusses on age of the student. Regardless of age, different classes and settings provide different status problems; some classes are much more heterogeneous in social status than others. I will devote several chapters to status problems and what can be done about them.

Use of Research

Most relevant for this book is the research which has applied useful theories to classrooms. In some cases, I find the theory and research sufficiently strong to assert with some confidence that there are specific desirable effects of groupwork on student behavior. To support such claims, I will present relevant data from research. Particularly in the chapter on groupwork in integrated settings, where I have done extensive research, the reader will find the specific kinds of measurable behavior depicted in tables. This should prove helpful for the practitioner because she/he will know just what kind of desired effects to look for in evaluating the success of instruction.

In my own research on classrooms, I have always worked closely with teachers who have left the classroom for graduate work. Many of the dissertations of these teachers are the best sources of evidence in the book. It has always been these graduate students who were concerned to make the research relevant and practical for the classroom instructor.

How True are the Principles?

An experienced practitioner obviously wants to know how "true" any assertions I might make are for their own clssrooms. Will these propositions hold in all settings? What are the dangers of things going wrong? Are the risks worth the gains?

Let me be perfectly frank: I do not know for sure whether the principles hold under all conditions. But I do know of a variety of classroom conditions where the data are supportive of the propositions. What the practitioner must do is think about what is likely to happen when these principles are applied. There is no way that a set of recipes in a book will relieve the instructor of this responsibility. If it appears that nothing untoward is likely to happen, then it may well be worth the risk to try and accomplish teaching objectives.

Chapter II

Groupwork and Teaching Objectives

This is not the first book to be written about groupwork. There are good works available; and I will take the opportunity to refer the reader to them where relevant. Many of these other books stress the effects of groups on students' feelings and attitudes toward each other. There are indeed socio-emotional gains from groupwork, but first I would like to discuss the use of this strategy for the teacher whose objectives are more intellectual as well.

Intellectual Objectives

After an instructor has introduced new concepts and illustrated how they apply, there comes a time in the teaching and learning process, when the student must obtain some active practice in using these new ideas and applying them in various ways. Traditionally, methods of accomplishing these goals include written papers, exercises in class time (known as seatwork), and public recitation where the teacher asks the students to make application and one student at a time tries to do so, while the rest of the class listens.

There are obvious limitations to these techniques. Clearly, when recitation is used, only one student at a time gets the "active practice." There is no evidence that I know of which says that listening to other people assimilate new concepts is the same experience as doing it for yourself. Exercises and essays are the time-honored methods of teachers everywhere. Yet we all know that younger students, low achievers and less motivated students are loath to carry out the prescribed exercises. If the teacher assigns the work during classroom time, the children are very likely to be found doing anything but what they are supposed to be doing (Berliner, et al., 1969). If the teacher assigns homework, many students, especially in inner city schools, will not do the work. Even among better motivated college students, there are limitations to the essay. Understanding and assimilating new concepts and writing about them demand both cognitive processes and the writing skills. Problems with writing are then compounded with the understanding and thinking problems. Furthermore, until the student gets back the corrected essay or exercise, there is no opportunity to discover confusion and error. As any busy instructor knows, the lag between the student turning in a paper and receiving it back with adequate comment, may be embarrassingly long.

Groupwork will produce more active, engaged, task oriented behavior than the traditional seatwork alternative. However, proper steps must be taken if the objective is to achieve learning and assimilating of new concepts. There is no point in producing active engagement if the discussion represents collective ignorance. The students must have the vocabulary and resources to achieve a required level of intellectual discourse. Furthermore, there must be some way to structure the experience so that people will listen carefully to each other, explain to each other, and provide some corrective feedback for each other. All of this is unlikely to take place by magic; the teacher has to lay the groundwork through meticulous planning and careful instructions to the group.

Another intellectual objective is learning through creative problem solving. In American society where so much emphasis is placed on individual achievement, it has to be explicitly pointed out that many problems are solved better by a group than by an individual working alone. For many years the demonstrations developed by Jay Hall of the superiority of group products to those of the individuals in that same group have been carried out by educators and business consultants who need an effective way of teaching this simple lesson (1971). Social psychology has not developed a clear idea of just which intellectual tasks are better accomplished in groups. All of the Hall tasks involve problems of survival for hypothetical groups, where they must pull together their individual knowledge and insights to produce solutions for the optimal use of objects available to further group survival.

In my own analysis of this issue, the kind of problem which is better done by a group is one where people have something to learn from each other; each person may have some information relevant to the solution. In addition to the sharing of technical and concrete factual information, people's thinking and insight are stimulated by the ideas and questions offered by other group members. This is "brainstorming" which executives in the business world have tried to make a self-conscious process.

Students have much to gain from participating in creative group problem solving. They learn from each other; they are stimulated to carry out some higher order thinking; and they experience an authentic intellectual pride of craft when the product is more than what any single member could create.

There is much research on small groups which documents the generalization that some tasks are better achieved by groups. However, without a general theory concerning which tasks are better done in groups, this research is of no particular use to the practitioner. More useful is that work of Piaget and researchers in his school of thought on the subject of group interaction and intellectual functioning. Piaget sees interaction between children as one of the chief motivations of their intellectual development. Through exposure to different points of view, they come to examine the environment more objectively and to use other than their own perspective (Sharan, 1976; Piaget, 1951, 1970; and Inhelder, 1974).

A fascinating experiment which illustrates this principle is the work of F. Murray on the acquisition of conservation through social interaction. He composed groups of three kindergarten children. One was able to solve the classic Piagetian conservation task; the other two were not. They were told that they would not get a score for their solution unless a correct answer was reached unanimously. They were free to use all the equipment and to experiment. A week later, all were tested individually on the same basic principle, but different materials made up the test. Many children who were not able to solve the problem in the first testing were able to do so after their experience in the group. In addition the quality of the solution given by children who could solve the problem in the first testing was improved (Murray, 1972).

I do not think the results of this experiment only apply to immature children. It illustrates two good things that can happen to intellectual functioning in groups. Through intense group interaction, individuals can achieve genuine insight and learning from each other and from the interaction of materials and people. Secondly, those who know more are not exploited by having to teach others in the group; they instead come to learn more and to understand what they know--better through the process of demonstration and communication with others.

Increasing Engagement

Recent research on why achievement test results in public schools are often disappointing, especially for children of lower social class background, points to a simple problem. Some children do not spend adequate time on learning tasks. Sometimes this is a management problem; teachers do not allocate enough time to learning skills measured on these tests; or teachers spend too much time organizing and having children wait; or teachers do not rove around the room enough, giving feedback to the students on the correctness of their work. But sometimes the lack of time on a task is a product of the student's refusal to work.

The Beginning Teacher Evaluation Study, a monumental work of classroom observation and achievement testing, revealed that on the average, students observed in Grades 2 and 5, spent at least 60% of their time in seatwork (Berliner et al., 1978). There was more seatwork in Grade 5 than 2. Over half the time during reading and mathematics, students work on their own, with no instructional interaction.

Why is this important? Because engagement rates in these self-paced settings are markedly lower than in other settings. This means that students tend to be doing something other than their assigned work when they are left to their own devices--and the students observed in the Beginning Teacher study were the students who needed to work because they were achieving in the 30-60th percentile on the standardized tests. Furthermore, this study finds strong relationships between engagement rates and post-test achievement scores, holding constant what the individual had acheived on the pre-test.

The old-fashioned "seatwork" is often passed off as individualization, because children are found working at different tasks at different paces at their seats. But without corrective feedback given in a timely fashion and without keen observation by the instructor to see if the task is appropriate to the individual, this method can hardly be said to resemble the diagnostic-prescriptive individualization model.

I would argue that this problem of desengagement during seatwork is partly a product of choosing a method of organizing students which leaves the student who rarely succeeds in schoolwork quite alone. The teacher cannot supervise as directly and efficiently as in whole class instruction where students who do not conform can be quickly seen and urged to get back to attention or work. The students are receiving very little information on how well they are doing or how they could be more succcessful. The tasks themselves are rarely sufficiently interesting to hold the students' attention. Unless the children take total responsibllity for their own learning (a difficult task to achieve with less successful students) they will drift off task simply because there is nothing to compel them to stay with it.

But this leaves the instructor with a dilemma. If the explanation of the concepts has already been presented on a whole class basis, there is not much point to going back to that format. The students need to practice with the new concepts and relationships; seatwork seems unavoidable. Here is where cooperative relationships between children provide a good answer to this teaching problem. Students can teach one another; they can give each other assistance; they can work as a group on a sample problem. These interdependencies can be momentary or a long-term project.

The interactive student situation will provide more feedback on the learning process. It will give more opportunities for active rehearsal of the new ideas, and the situation will show dramatically increased engagement rates in comparison to seatwork (Ahmadjian, 1980).

If the instructor can organize the classroom so that students are working cooperatively and taking responsibility for their own learning, there is a sound basis for expecting improved learning outcomes. The Beginning Teacher Evaluation Study took a weekly rating in classrooms of the extent to which students took responsibility and the extent to which students helped each other. These rating scales were the strongest and most consistent predictor of achievement at the classroom level.

Although these goals are not easy to achieve, they are well worth considering. Cooperative relations between students in carrying out their own learning tasks are a major tool for increasing active learning among low achieving students. It is therefore a tool for the achievement of major instructional objectives.

Language and Oral Communications

Cooperative tasks are an excellent tool for still one more learning objective--the learning of language and the impovement of oral communication skills.

In any language learning setting; in bilingual classrooms, or for students of any age who need to improve their skills in oral communication, active practice is of the essense. Recitation and drill are limited tools. They cannot compare to an exercise which forces students to talk with each other with respect to the active practice per student.

Language learning specialists argue that young children do not benefit from patterned drills so common in the English as a Second Language approach. Rather, children learn language by using it is a more natural fashion. If the instructor of the bilingual classroom sets up a series of tasks which get children to talk to each other, using the new vocabulary associated with an interesting task, the possibilities for active language learning can be greatly enhanced.

The same argument applies for increasing skills in oral communication. Compare the traditional approach of having one student stand up and make a presentation to the class, with setting up small groups where each member is responsible to communicate a key part of the task to all the other members of the group. If the group must understand what each member has to communicate in in order to accomplish the goal, they will ask questions and force the presenter to be a clear communicator. The group method will provide far more active and relevant practice than the rare event of making speech to a quiet whole class.

Socio-Emotional Objectives

There are a whole range of socio-emotional objectives for which groupwork is commonly recommended. Social research has gathered impressive evidence to the effect that cooperative groups, where people work together for group goals, produce a number of desirable effects in people's feeling for one another. When groups engage in cooperative tasks requiring interdependence of members, they are more likely to form friendly ties and to influence each other than when the task stimulates competition among members (Deutsch, 1968). Slavin sums up the research as follows:

> Laboratory research has produced conflicting results when social scientists have tried to compare productivity of the group working under competitive vs. cooperative reward conditions. For conflicting reviews of what this research literature say, see Johnson, D.W. and Johnson, R.T. "Instructional goal structure: Cooperative, competitive or individualistic." Review of Educational Research, 1974, 44, 213-240, and Michaels, J.W., "Classroom research structure and academic performance," Review of Educational Research, 1977, 47, 87-98. Of course this laboratory research is evaluating the group product in most cases, whereas the focus of our discussion has been on the process of working in groups and the favorable effects this might have on learning and understanding or attitude for individuals.
>
> In contrast to the research on performance, the laboratory research relating cooperation to group cohesiveness is expectionally consistent. Virtually, all of the lab studies in which liking of others or related variables were measured found that cooperation leads to greater mutual attraction than do individualization or competition, even when the effects on performance go in the opposite direction.
>
> In summary, the lesson from the laboratory studies is that cooperative increases cohesiveness, but has uncertain effects on performance. (P. 11, Slavin, Robert. "Cooperative Learning." Technical Report No. 267. Center for Social Organization of Schools, The Johns Hopkins University, December, 1978).

Because of this research, cooperative groups are often advocated for desegregated classrooms where one would like to see the different racial groups learn how to get along together, form cross-racial friendships, and reduce any sterotypic views they have of each other (Weigel, R.H.; Wiser, P.L. and Cook, S.W., 1975). However, it takes much more then setting interracial cooperative groups to work on a collective task to produce the desired results that Deutsch found. It is true that one is more likely to get results than with a competitive, individualistic reward system. But even under cooperative conditions, the groups can fail altogether to operate cohesively as a group; interpersonal relations can be the opposite of harmonious; hierarchies can develop with cooperative groups. Simple setting up of interdependent groups with group rewards is not uniformly effective; the instructor can do much to obtain these desired results consistently from group to group. How to get benefits of cooperation without its drawbacks is the major goal of several chapters of this book.

Socialization Objectives

Of the many educators who have written about the favorable effects of small groups in the classroom, only the Sharans (1976) point out that when the teacher makes a clear delegation to the student group of a learning task, and allows that group to make a series of decisions as to how they will proceed, there is a special socializing effect. The Sharans argue that having students experience making decisions on their own rather than being told by the teacher exactly what to do will have a desirable political socializing effect on them. They will have more of a sense of control of their own environment; they will learn how to be active citizens (in a collective rather than in an individualistic sense). This constitutes an antidote for classroom organizations where the teacher does all the directing and telling others what to do; while the student plays a passive role.

There is experimental evidence that when students experience situations which are cooperative in nature, they will come to prefer cooperative rather than competitive methods of social organization (Breer, P.E. & Locke, E.A., 1965). In a classroom experiment, Bloom and Schuncke demonstrated that if children experience a series of group tasks where some form of interdependent organization is necessary for completing the task they learn to prefer cooperative methods of social organization. In this curriculum, each activity provided information experientially to the children regarding the usefulness of interdependent task means and goals. This information was reinforced by the teacher as each task was completed. Children who had these experiences were more likely in a later experience (quite unconnected with these classroom experiences) to choose the interdependent cooperative method of attaining goals than the children who were in control classrooms and had never experienced the curriculum on cooperation (Bloom, J. & Schuncke, Jr., 1979).

There is a third objective of groupwork which has to do with socialization. Groups can teach children and adults how to carry on a rational organized discussion and how to plan and carry out a task as a result of that discussion. This is a set of skills which adults frequently lack; they do not know how to listen to other people in groups; they do not know how to work with other people's ideas; they are often more concerned with dominating the discourse than with participating. In so many aspects of adult work and organizational life, these skills are critical, yet we rarely teach them in formal education.

In closing this discusssion of socialization, I would like to quote David L. Abelon, Senior Circuit Judge, U.S. Court of Appeals for the District of Columbia Circuit, Washington, D.C.:

> In resolving differences, "civility" in both its common meanings should prevail. The first is related to politness and accepted norms of social behavior in civil society. Civility can set norms of honest discourse, promoting listening as well as talking. The second meaning I give to civility is the quality we strive for in the name of civilization, the ideal state of human culture where human beings are the measure of value and humankind is the subject of enhancement.
>
> ("Science, Technology, and the Court," Science, Vol. 208, No. 4445, 1980, p.661)

Chapter III

The Dilemma of Groupwork

Educators are attracted to the idea of groupwork; it seems so much more democratic and creative than traditional classrooms where students sit quietly, recite on call, take notes on the lecture, or follow instructions in programmed materials. Even in higher education, where the lecture method has so long ruled, professors say they would like to try discussion groups or the "seminar" method. So they put in charge of the discussion sections an inexperienced teaching assistant, sending in a novice for a job which most tenured professors admit they find frustrating and unsatisfactory.

Despite the appeal of groupwork, one finds it only rarely in classes of any age level. Why should this be? The teacher who has no more tools for the planning of groupwork than an initial attraction to an ideal group as a democratic and creative setting for learning is likely to run into trouble in trying out the new methods. More than likely, the teacher will do one of three things: (1) take an assignment one would ordinarily make to an individual and give it to a group; (2) ask a group to meet and discuss some assigned question; or (3) ask the group to plan what they would like to do in the way of a group project.

The results of this "experiment" are typically dismaying. Sometimes the groups can find nothing to talk about; in younger groups, this often leads to "fooling around" forcing the teacher to become a disciplinarian and a policeman rather than an educator. If the assignment is similar to one of the subjects taught in the classroom the student who is the highest achiever in that area is likely to come forward and do the work while the rest of the group sits by.

The group who has been given a discussion question, even if they do become involved and start talking about the issue, may become dominated amazingly quickly by a member who is perceived to have high academic ability or by a student who is influential and socially powerful in informal social relations. The teacher who listens carefully may note that some of the girls in a mixed sex group are saying almost nothing; also, there may be students from a minority ethnic or racial group who are non-participants. The teacher wonders whether they are really disinterested in the task or whether they are underestimating what they might have to contribute to the group. Lastly, the quality of the discussion may be quite distressing; the group loses the main point of what they are supposed to be discussing. They do not listen to each other most of the time. They may seem more interested in talking frequently and loudly than in genuinely responding to what the other person has to say. And they rarely have anything complimentary to say about each other's ideas. Subservience to a loud or fast-talking peer is hardly an experience in classroom democracy, nor is talking to hear oneself talk an exercise in creativity.

Let us imagine a teacher who observes many groups that are dominated by the best student or by the person who is believed to be the best student. Suppose that this teacher persists beyond the first experiment and tries to recompose the groups so that students of more similar ability and/or interests are placed together. Much to his or her dismay, a new status order quickly arises with the same symptoms of domination and non-participation. In some groups there is a status struggle with much loud arguing between two or more members of the group and rather acute discomfort by the other group members. What is the matter? Are the students just too immature to work in a group? Or has the idea of groupwork been oversold so that the wise teacher would do well to return to traditional methods?

The answer to the first question is that it is not a problem of youth. Adults will show much the same behavior in small groups given tasks like these. Although domination and status struggle will be less noisy, the person who is felt to be most knowledgable about the subject is likely to dominate the group. If the instructor tries to avoid having one person more expert than the others by setting a novel new task, then different social characteristics like the prestige of the job one holds, race, or sex may act as the basis for expected competence on the new task. And the person with a higher social status is likely to talk more and be more influential even if the new group task has nothing to do with any of these social statuses.

Status problems in groupwork among college students are further compounded by the typical instructor's belief that because one is dealing with adults, no special planning or structuring is necessary when assigning group tasks. Even though the students are adults, groupwork still requires careful structuring and preplanning, and sometimes training in how to behave in groups. In the college classroom, students respond with boredom and anxiety to the instructor's permissive invitation, "I want you to discuss on a topic you really think is important." If the instructor sets a technical discussion question, the discussion is a case of collective ignorance; the students are angry that the teacher is not doing his/her job and teaching them something. If the group task is a joint paper or presentation, it is often the case that one student decides to ride on the efforts of his/her classmates. He/she fails to carry out part of the project and lets the others "cover." This is most upsetting. to the group; they are often unwilling to sanction a peer for this behavior, yet they feel it is manifestly unfair for that person to receive a satisfactory evaluation for a refusal to perform. The group ends with such a bad feeling about the experience that it may be difficult to persuade the participants to try a group project ever again.

Has groupwork been oversold? The answer to this question is that the proper design of groupwork for classrooms cannot be achieved without a more general understanding of some of the phenomena that take place in human groups. Once the teacher has made a proper analysis of certain problems like status differences in the group, there are available some relatively simple interventions which can "short-circuit" undesirable domination.

But analysis and application of general principles are not enough. In addition, the proper engineering of groupwork for classrooms requires meticulous analysis of the nature of the task, the resources it requires, and the relationship between the group experience and attainment of learning objectives. Finally, groupwork requires very careful preparation of materials, management of the time available, and considerable attention to creating totally clear instructions to the students. This chapter introduces a minimal number of concepts needed to understand some of the phenomena that take place in small task groups. The next chapters will again introduce a minimal number of abstractions which have proven useful in structuring the group task so as to avoid many of the common problems listed above.

Behavior of Task Oriented Groups

Laboratory studies of small groups working on discussion and problem-solving tasks usually find that participation of various members is unequal. For example, I have studied over 100 four-person groups in the past five years. It is practically never the case that each person contributes one-quarter of the speeches having to do with the task at hand. Instead, one person may be extremely active and another person may have almost nothing to say. A moment's thought will lead to the realization that for most of the time allotted to the task by the person in charge only one person can talk at a time (although careful observation of many groups reveals that two people quite often are talking at the same time). If one person starts by doing most of the talking in the first few minutes, other people are more likely to address remarks to that person than they are to talk to someone who has said nothing as yet. Having people talk to Mr./Ms. High Initiator only encourages him/her to go right on being a high participator. If you are a member of the group who has said nothing as yet, it may feel quite awkward to start an entirely new line of thought, even though you happen to have the most valuable idea in the group. You may content yourself with just commenting on what the high initiator has said, or you may simply murmur agreement with what that person has asserted, or you may continue to say nothing.

As the groupwork continues, it may become quite accepted by the group that the high initiator does most of the talking and is the most influential person, while you do little except to go along with the group. If you are asked who was the most influential person in the group, after the task is finished, you are very likely to choose the high initiator. The high initiator is likely to chose him/herself as most influential. Even among a group of people who do not know each other and who have been selected for a laboratory study on the basis that they are all male, 19 or 20 years old, and white, this hierarchy of influence will emerge. The members agree that one person has made the most important contribution to the task and has had the best ideas (Berger, Conner, & McKeown, 1969).

If the very same people are split up and assigned to different groups with different tasks, they will not necessarily behave the same way. High initiator may become medium initator, and low initiator may become the most influential person on the next task. These differences in behavior between tasks are a product of three factors which must always be taken into consideration by the engineer of groupwork: the nature of the task, the initial patterns of interaction, and the expectations all actors hold for the competence of the task of each member of the group.

If this same group continues meeting over time, there will be a remarkable stability in these rankings on influence and leadership. As Webster describes this stability, "If the group meets for several sessions on successive days, the actor who ranked highest on initiation at the end of the first session is likely to rank highest on initiation at subsequent sessions" (Webster, 1975, p. 140).

Among a group of status equals, this hierarchy does not always develop smoothly. In many laboratory groups which have been observed there is an early status struggle. Two members will vie vigorously for the position of who will be the high initiator. They will sometimes attempt to form coalitions with other members of the group. The quality of the discussion suffers noticeably under these circumstances. (For an excellent discussion of these laboratory findings, see Murray Webster, Jr.: Actions and actors: Principles of social psychology, Chapter 6, "Power and Prestige." Cambridge, Mass.: Winthrop Pub., Inc., 1975, pp. 135-162.)

Teachers often see students as exhibiting persistent behavior patterns because of personality characteristics which are inherent in the individual and will reveal themselves in a variety of classroom situations. Teachers also look at students in terms of a general "academic ability" concept and develop ideas about how well they will do in any new classroom task. In contrast, social psychology, if it has one single important lesson, teaches that behavior is very often situational. The dramatic change in people's behavior from one task and group composition to another is a product of the differences in the social situation.

Students of small groups have tried to show that certain people have "leadership abilities" and that these people will be "leaders" regardless of the task and the composition of the group. Laboratory studies fail to show that leadership is a consistent characteristic of a person--rather, one person may assume a leadership role in one group but not in the next. The person who emerges as leader among a group of status equals partly depends on the nature of the task (Carter, Haythorn, & Howell, 1965). Classroom teachers often speak of certain students as exhibiting "leadership ability." These are often the better students. In doing so, the teacher is making the same error as those social psychologists who assumed that leadership existed across a variety of social situations. It may well be true that a certain student acts out the role of leader, but this may be a product of an informal prestige hierarchy in the school yard or because the teacher is constantly calling upon this person to play the role of leader in the classroom. Other students have the capacity to play the very same role, but the situation is never structured to allow them to do so.

This tendency of people to respond differently to new social situations can be put to work by the instructor in designing groupwork. By restructuring the social situation, one can produce new and different and desirable behaviors. The perennially quiet student may play a leadership role. The poor student who often avoids classroom work may become a highly active participant on an academic group task. He/she may even on occasion serve as a group expert.

Students will behave quite differently in different groups when the teacher modifies the composition of the group, the nature of the task, the ideas about how one ought to behave in the group setting, and the expectations for competence of each member of the group.

The Laboratory vs. The Classroom

The typical laboratory group consists of people who do not know each other; they are often college students, all of the same race, sex, and age. There are some key differences between these laboratory groups and classroom groups. There are also some key similarities which allow us to transfer and apply some of the knowledge gained from laboratory research to the classroom.

Differences

A classroom group is by no means a meeting of "status equals." Classmates are not typically all of one social status--there are girls and boys. Sex constitutes one kind of a status characteristic, and in many social situations men have a higher social status than women (for example, in the administration of schools and universities). Other kinds of social status difference within a classroom are racial and ethnic differences. Certain racial and ethnic groups in American society have historically been powerless and have had far less than their fair share of the economic resources in the society as a whole. At the present time these groups can be said to have lower social status than White Anglos who control economic resources and occupy more powerful positions. When we bring together people of different social status in a collective task, the stage is set for a reenaction of the pattern of high status domination of the society as a whole. This holds for both adults and schoolchildren. Many studies show patterns of unequal participation in mixed status groups of schoolchildren and adults--patterns of domination by high status group members (Strodtbeck, James, & Hawkins, 1957; Torrance, 1955; Cohen, 1972; Zander & Van Egmond, 1963).

There are other kinds of status differences in classroom groups besides those that are a reflection of status distinctions made in society at large. There are "objective" differences between students in mastery of the topics in the curriculum. These differences are objectified in test scores, grades, comments by the instructor on how well a student is doing, and in the difficulty of the task a teacher will assign a certain student. These differences in expertise are not private knowledge. Teachers make public evaluations, particularly during recitation; grades are sometimes posted. The students themselves compare grades, test scores, the speed with which tasks are completed, and the difficulty of the tasks or text they have been assigned.

I have placed the word "objective" in quotation marks in order to stress that the defining of a classroom skill and what constitutes "expertise" in that skill has many elements which are a matter of social definition. These differences in mastery of a skill are not all given in the nature of the subject matter. For example, expertise in arithmetic as defined by classroom teachers often involves the speed with which a student completes a series of numeric examples on a test and does not take into account whether or not a student grasps the underlying concepts and can demonstrate transfer of understanding to a more life-like problem solution. Thus the best arithmetic student in the first classroom might not be the best in a classroom which stressed the second definition of being good in arithmetic.

These "objective" distinctions constitute a relatively rational basis for expert status in group tasks which involve the very same skill on which a student has been defined as excellent. For example, if the instructor sets a group task which is identical with individual exercises and tests the students have been experiencing, then the student who is seen as the most advanced in the relevant skills will be viewed as a high status expert in the group. His or her opinions will have more weight than those of other group members who have not been evaluated as highly in this subject. The other students in the group may decide to let the "expert" do the whole job.

Expert status which will affect influence on a task relevant to the dimension on which the person is considered an expert is quite different from other kinds of academic status which have effects even on tasks where there is no rational reason for them to do so. Some academic status differences have the power to spread into new tasks which have no relationship to the initial academic difference. For example, in our research, we have identified reading ability among elementary school students as a particularly powerful status characteristic. Not only will those children who are seen as high in reading ability have high status on a reading group task, they will also have high status in a group task which does not require reading (Rosenholtz, 1977).

Reading ability has this powerful effect, in all probability, because reading is defined as a central academic skill, and because it is made a prerequisite for most academic tasks by the fifth or sixth grade. Those who are good readers generally receive better grades in many subjects than those who are poor readers--partly because reading is a prerequisite for successful completion of assignments in social studies, science, and even in word problems in mathematics.

Children (and some teachers) see reading ability as an index of something more general than a specific, relatively mechanical skill. Reading ability is used as an index of how smart a grade school student is. Thus good readers develop a general expectation for intellectual competence over a wide range of tasks, and poor readers develop general expectations for incompetence at that same range of tasks. Rank on reading ability is evidently public knowledge in many elementary classrooms. In most of the classrooms we have studied the students are able to rank order each other on reading ability with a high level of agreement. Furthermore, the teachers' ranking is in agreement with the students' ranking. This means that if you are the poor reader, your classmates hold expectations for your incompetence in addition to your own low expectations for competence. Likewise, they hold high expectations for competence for those they perceive as having high reading ability. These students in turn expect to do well and know they are expected to do so (Rosenholtz & Wilson, 1980).

As the students grow older and reading skill is not so problematic, a general academic ability ranking can act as a source of status among classmates. Some students are perceived as better at schoolwork or as having higher academic ability. These students will also act as high status members in a wide range of group tasks, including those that involve no academic skills at all (Hoffman & Cohen, 1972).

In review, a major difference between classroom groups and most laboratory groups is that classroom groups are often mixed status groups. There are status differences based on societal distinctions such as sex, race, and social class. There are differences in expert status which are of specific relevance to the task assigned by the teacher, and there are academic status characteristics such as reading ability and academic ability which can generalize to irrelevant tasks.

In addition to people who dominate groups because they are high status, there are other people who dominate groups because they are socially powerful. Because classrooms are ongoing social systems in comparison to "one-shot" laboratory study groups, there is still a further relevant difference. There is a world of informal social relations among classmates, particularly in the settings where membership is stable over time and where most people in the school know each other. During the many interchanges outside and inside the classroom, some students come to be widely influential. In classrooms where social power has been studied, certain children are identified with great regularity as one of the three students who are "most able to get you to do things" or alternatively as one of the three who are "least able to get you to do things." As in this research literature, I will refer to this ability to influence others as social power.

Techniques of social power among children are not always physical coercion. Among boys social power is often correlated with athletic skill. Several studies have revealed that among girls it is correlated with attractiveness and being good at schoolwork. Powerful children or adults can appeal to others by making them feel very good if they conform to his/her values and very guilty if they refuse to conform. This is the hallmark of the powerful adolescent in a peer group context where powerful members can persuade others to dress and walk in ways which seem bizarre to outsiders.

In more subtle ways, this same phenomenon of social power is at work in adult groups. Certain individuals may be seen as attractive and influential on the campus or in the organizational setting outside the classroom. These individuals have the same power to influence others in a group task assigned by the teacher as they do in the organization at large.

Similarities

Classroom groups and laboratory groups do have some important similarities. We have defined groupwork as a collective task, where individuals need each other in order to attain the group goal. In most small group laboratory studies, the group is given a collective task. Members are interdependent in carrying out that task.

The concept of a collective task is crucial in understanding why high status individuals come to dominate groups and why hierarchies of prestige develop in groupwork. An important feature of a collective task lies in the directive to come to some concensus as a group or to make contributions to a joint product. This produces a situation where members are forced to evaluate each other's ideas or contributions. Their group product is only as good as the ideas and contributions that go into it. Assuming that a group member is involved and anxious for the group to do a good job, that group member will be very concerned with the competence of every other member who makes a contribution to the final product. This has powerful effects on people's behavior as they struggle to evaluate and are evaluated. Some of the side effects are not particularly desirable in an educational setting, and much that we have to advise is in the way of softening some aspects of this rugged interpersonal process.

Another key similarity is the presence of an authority figure who makes a clear delegation of a task to the group and is in a position to evaluate the individual's performance and/or the group product. In the classroom case it is easy to identify this authority figure as the teacher. In the laboratory, we do not often think of the host experimenter as an authority figure operating in the organizational context of the university where the experiment is run, but that is the way most experimental subjects regard him or her. Just like students in classrooms, subjects in experiments are very concerned with the evaluation the host experimenter might make of them or their group. They are, just like students, dependent on the clarity of instructions for the success at their task. Furthermore, they are usually paid for their time and feel constrained to do a good job on the task for which they have been hired. Students in classroom groups are not paid, but they are concerned with the teacher's evaluation and if it is made clear to them that responsibility for success of the group task rests on their shoulders, they will undertake responsibility to carry out the task in a serious and mature fashion, even when quite young in years.

A teacher who is successful in groupwork must be aware of his/her role as an authority figure. He/she must make a clear and explicit delegation of responsibility and authority to each workgroup. The students should also be clear on the criteria for formal evaluation of performance and who has the right to apply these criteria.

Status Generalization: A Self-fulfilling Prophecy

I have discussed a number of problems with groupwork. The central problem has been identified as the unwanted domination of groups by a person who does not necessarily have the best ideas, but who dominates by virtue of social or academic status. Also undesirable in this situation is the member of the group who says practically nothing and who emerges from the situation feeling like they have been incompetent on the group task.

Before going on to give some principles for treatment of the problem, it is essential to understand how this process operates. Just what happens to allow a person who is high on reading ability or a White person to become the most influential person on a task which has nothing to do with reading or race? Many explanations are possible. I have found that the explanation offered by Expectation States Theory is enormously useful as a basis for developing ways of intervening and preventing undesired domination by high status members of classroom groups. This is a body of theory developed by sociologists and tested in laboratory and field settings. The theory is set out in rigorous and logical form; parts of it have even been mathematized. (For a general review of these findings, see Webster & Driskell, 1978.)

When the instructor brings together a group in the classroom which is mixed in perceived academic status on a collective task, the stage is set for the process of status generalization. According to the theory, the scenario proceeds as follows: If the task is one which does not resemble any of the regular school subjects, no one will be seen as having initial expert status. The group has no really rational basis for expecting one person to be much more competent at this particular task. However, the initial status differences in the group become the basis for people to decide who will be the most competent and the least competent at the new task. The collective nature of the task forces the group members to make evaluation of each other's competence. Attached to status characteristics such as reading ability are expectations for competence and incompetence at a wide variety of tasks. These expectations, often unconscious and always invisible, become activated in the new situation. They then become relevant to the new collective task even though there is no rational reason for this to be the case. Finally, they become the basis for assignment of expected competence on the new task.

Once the three hypothetical steps have taken place--activation, relevance, and assignment--the stage is set for the familiar pattern of behavior described earlier in this chapter. The students with high status expect to be and are expected by others to be more competent on the groupwork assignment. They start by talking more. The low status students expect to be and are expected to be less competent. They start by doing more listening and less talking. The net result of this process is a prestige and power order in the small group which is like the initial status order in reading ability or other status ranking on which the group differs. This process can be described as a self-fulfilling prophecy whereby initial differences in expectations for competence turn out to be observable differences in participation and influence.

There is evidence to the effect that groups taken right out of ongoing classrooms function just as the theory describes. For example, Rosenholtz had fourth graders rank each other on how good they were at reading. Then she composed four-person groups of classmates who were all the same sex and race, but differed on perceived reading ability. She had some groups with mixed high and medium reading ability and some groups with mixed medium and low ability. She asked them to play a game called "Shoot the Moon," which has functioned as a measure of status effects in much of the research on the application of Expectation States Theory to classrooms. This game requires no school-like skills. However, it does meet the requirements of the theory that it be a collective task. The group must make repeated decisions as to which way to proceed on a game board. When the group has decided which way to go, the host experimenter rolls a die which determines how many spaces the playing piece will advance. The total score of the group depends on adding up the values printed on the space where the playing piece lands. The group must reach the moon in 14 turns or less and is directed to attain the highest score possible. Even the addition is done by the experimenter. On a task like this, Rosenholtz found that the high readers were more active and influential than the medium readers. And in the other set of groups the medium readers were more active than the lows. Furthermore, these results held for the female groups as well as the male groups (Rosenholtz, 1980).

Similar results were found earlier by Hoffman, who composed groups from a junior high school social studies classroom. Hoffman had the students rank each other on how good they were at schoolwork. His task was introduced to the students as a "game" that was being developed for non-school purposes. Yet, his results were just like those of Rosenholtz. The effect of academic status generalized into the new task where no academic skills were called for (Hoffman & Cohen, 1972).

The significance for teachers of these two studies is that even if, in an effort to make groupwork a great success, the teacher chooses a game-like task which requires no school-related skills, it will not prevent the phenomenon of status generalization from taking place. The high readers will assume they will be the most competent at this new task as well.

Classrooms have such complicated social structures from the point of view of status and power relationships that examination of what happens in small groups can simultaneously reflect more than one of these status and power factors. For example, a classic study of third graders by Zander and Van Egmond formed groups of classmates and had them do such problem-solving tasks as coming to agreement on the number of beans in a bottle. Analysis of the data revealed that there were at least three variables which predicted who would make successful attempts to influence the group. Those children who were higher in IQ tended to be more influential. Those children who were named as socially powerful by their classmates were more influential in the small groups, and boys were so much more influential than girls that even girls who were named as socially powerful were less active and influential than low power boys. These results can be seen as the simultaneous operation of academic status, sex as a status characteristic, and the informal power and influence which develops between classmates. These forces are all operating during the innocent classroom task of coming to concensus on the number of beans in a bottle--a rather silly task where none of these status and power variables have anything much to do with competence from a rational perspective.

The Working Concepts

In bringing this theoretical chapter to a close, I want to review briefly the major concepts which can be used to create solutions to the problems described. The first major concept to remember is the idea of the collective task where students are forced into an interdependent relationship in order to accomplish the goal set by the teacher. This is the key condition which sets the stage for the operation of the self-fulfilling prophecy we have described above.

The second major concept is that of evaluation. Interdependence forces people to make evaluations of each other's competence at the task. If there is no expert in the group who is known to excel at this particular task, the members will make use of other status information to organize their evaluations for competence. Students in classrooms are constantly making evaluations of each other. Furthermore, students care a great deal about their classmates' evaluations of their competence.

Evaluation takes on an added dimension because groupwork is set in an organizational context. People in the organization, such as the teacher, have the right and duty to make formal evaluations of the student. This issue of formal evaluation also affects the operation of people in groupwork. Even while students are working in groups, they will be very concerned with the teacher's evaluation of their contribution to the group and the teacher's evaluation of the group product. Thus the instructor must think carefully about interpersonal evaluation in the group and about the formal criteria for evaluation of achievement in the context of the group. The whole issue of what happens to evaluation of the teacher in the context of groupwork is quite critical and can never be ignored in planning groupwork.

The third major concept is that of expectations for competence. Students form expectations for competence for specific academic tasks on the basis of their past experience with these tasks and the evaluations they have received. What is not often pointed out is that student expectations for competence are a function of evaluations they receive from classmates as well as from the teacher. Some of these expectations for competence are specific and apply only to a strictly relevant task. We have called these differences in competence, expert status. Other expectations for competence, such as those based on reading ability or academic ability are capable of generalizing to a wide range of classroom tasks. These are termed status characteristics and the process is called status generalization.

We have introduced three major bases of differentiation between classmates: They may come from different social status groups; they hold different rankings on an academic status characteristic; and they develop informal relations of power and influence over each other. When a teacher assigns a groupwork task, she/he ignores these differences between students at his or her own peril. They are each quite capable of preventing the achievement of the primary objective of groupwork.

In the next chapters I take advantage of the general social psychological principle that behavior is often situational. By changing the social situation in which the groupwork task takes place, the teacher can avoid undesirable domination and non-participation by members of the groups. The concepts provided in this chapter are the working tools used to design these interventions. Furthermore, these concepts provide the tools for the instructor to analyze what is likely to happen given a groupwork assignment in a particular class.

Chapter V

Treating Expectations

Suppose that you have decided that you cannot avoid a truly interdependent task. You want the students to have the intellectual experience of doing a group paper or a group research project or making a group presentation. You want them to have the experience of creative problem solving as a group. Or alternatively, you may want to design a situation in which students of low academic status have an opportunity to be evaluated more favorably by classmates and themselves--in other words, you may want to treat expectations for competence in those students who show you that they have low general expectations for success in the classroom.

Perhaps your objective is to achieve interracial cooperation in a desegregated situation; or finally you may want to teach students how to work in groups so that you will be able to set group tasks throughout the year and so that they will have these important skills as adults. For any of these objectives, one must deal with the problems of differential expectations for competence in the group described in Chapter III.

MAKING A LOW STATUS STUDENT GROUP EXPERT

If your goal is to change low expectations for competence, then an obvious possibility is to design a situation where the student who is expected to be incompetent will actually be so competent as to be able to function as an expert with another student or a group of students. The simplest and probably safest way to do this is to locate a task where the student is already, actually an expert. An example might be a Spanish-speaking child who could teach classmates a song or a poem in Spanish. Even this fairly obvious strategy requires very careful analysis. Do not assume that because a student can speak in Spanish that he knows how to teach something in Spanish. He/she will need to be carefully prepared for the teaching role. Secondly, this is a kind of expertise which Hispanic students are expected to have--as a cultural or racial stereotype. It is unlikely that this experience will alter expectations for competence on other kinds of tasks, because the situation in which the child functions as expert is viewed in a narrow stereotypical fashion. It is similar to a situation in which females are expert in cooking or blacks expert at basketball. Despite these limitations, this narrow version of expertise has some merit if it gives the low status child a chance to function in the leadership role of a teacher. Unless the teacher points out that teaching the group itself, constitutes a special kind of expertise and represents competence in an important skill, the group will never notice that "teaching the song" is a different skill from "singing the song."

There are areas of strength for each student that can be employed in setting up groups with resident experts—areas of strength which are not stereotypical. I have seen classrooms with a list of all students' names, each listed as an expert of some sort. This simple technique can provide a workable group as long as the members actually believe that the student is an expert and the student is actually competent.

We have carried out many experiments where expectations were treated by having the low status person exhibit a high level of competence in the role of teacher of a high status student. This method of treatment is called Expectation Training. Theoretically, if one is successful in producing favorable evaluations of the student's competence, that is, he makes favorable evaluations of himself and the high status students make favorable evaluations of him--then new favorable evaluations combine with old negative ones based on the status characteristic. The result is an improved participation and influence rate in any new collective task that is introduced. Tasks for Expectation Training are not culturally specific or stereotyped for any group. We have used tasks like teaching something about the Malay language and culture, teaching how to build a two transistor radio, or teaching how to solve a plastic Chinese puzzle.

These laboratory studies have consistently shown in American and other cultural settings that Expectation Training can increase the participation and influence of children with low social status so that the result is a pattern of equal status behavior (Cohen & Roper, 1972; Cook, 1974; Cohen & Sharan, 1980). In a group which shows equal status behavior; you cannot tell who will be the most active and influential by a person's race, social class or academic status. Sometimes it is the high status member and sometimes it is the low status member.

The laboratory studies of Expectation Training were all with children who knew nothing about each other but the fact they were from different social status backgrounds. In an interracial summer school study, we were able to show that if Expectation Training were used the first week, it was possible to maintain equal status behavior for six weeks. At the end of the six week summer program, the Black children were as active and influential, if not more active and influential, than the White children on collective tasks(Cohen, Lockheed, & Lohman, 1976). In this summer school setting the curriculum did not require conventional school skills as a prerequisite to success on tasks in the curriculum. For example, one part of the curriculum taught movie making. Children worked in small groups rotating roles as camera person, director, actor, etc. All of this took place after the Black children had functioned as teachers of the White children on a series of academic and non-academic tasks. For this purpose the Black children came to the summer school a week early for special training in their role as teachers (Cohen, Lockheed, & Lohman, 1976).

Over the years of this research I have learned that there are some cautions that should be exercised in this particular treatment. It should never be undertaken lightly and not at all if the teacher does not have the resources (aides, older students, volunteers) to spend time with each low status child who will function in the role of teacher. The danger is as follows: If you allow the low status child to function in the role of teacher and to fail in that role, you will have knowingly exposed that student to another overwhelming negative evaluation. This must not be allowed to happen.

One of the most difficult things to achieve in this kind of a treatment is to convince the low status person of his/her own competence. You may observe that the student can both carry out the task and teach the task with considerable aplomb and skill. But you would be surprised to realize that students may still make a very low evaluation of their skill. The experiments on Expectation Training used video equipment to tape the skilled behavior of the low status student and to play it back to both low and the high status students, pointing out specifically where he/she was explaining things so well, speaking up, and acting so self-confidently. In the classroom situation, some way must be found for the adult to point out and reinforce the clearly demonstrated skills of the low status student so that neither he or anyone else in the group can miss them. (A tape recorder might be employed.) Obviously, the student must be so well prepared that this is genuine praise--never, never lie about such matters!

Expectation Training is a extraordinarily powerful treatment. The low status student not only displays impressive competence, but is in a powerful position to direct the behavior of the high status student as does every teacher--a rare opportunity for this student in most classrooms. Even though the low status student may teach a new non-academic task such as a Chinese puzzle, the favorable evaluations of the student as competent in the task and as a skilled teacher will transfer to a wide variety of tasks involving other intellectual skills. However, it is not the most practical treatment for the classroom setting. Teachers often do not have the time to prepare students for their role as teacher so that they are absolutely sure the child will not fail. Even if an aide is assigned this task, the aide will need to be carefully trained so that each child reaches some specific criterion level of competence before any demonstration of teaching skills takes place.

Another important problem may come up in having the aide do the training. If the teacher belongs to a high social status ethnic or racial group and the aide belongs to the same minority group as do the low status students, then one may unwittingly undo the effects of Expectation Training. Experimental results have shown that Expectation Training will not produce the desired effects in settings where the adults mirror the status order of the outside society, i.e., the Anglo teacher is the "boss" and the Hispanic aide clearly functions as a subordinate. Unless the aide and the teacher model equal status behavior for the children, the low status child is likely to think that it is illegitimate in a desegregated setting to speak up and tell high status children what to do (Robbins, 1977). Thus, even after Expectation Training, the children of high social and academic status will still dominate.

There are added complications in the classroom setting. One cannot expect the effects of Expectation Training to spread to specific academic collective tasks where some students have been publicly evaluated as "expert" by receiving the best grades. As explained in the previous chapter, the group will expect that the person who has received praise for a task like the one they are about to do and who has received the best marks in that subject will be the most competent. In order to avoid the student assumption that any task in social studies will be best performed by the best reader and/or the person who gets "A's" on the social studies' tests, special steps must be taken to redefine the skills involved in the new collective task. But that is taking me on to the next strategy: Defining Multiple Abilities. This is the strategy which has proved most practical and applicable in classroom situations. The use of groupwork is at the core of this strategy.

DEFINING MULTIPLE ABILILITIES

Let us return to the basic model of how expectations for competence become activated and relevant to new tasks set by the teacher. We have said that people will pick specific relevant competences as the first and preferred basis for deciding how competent they and other people will be at the new task. If there is no clear competence that is relevant (such as skill in drawing for an art task), then they will use social and academic status information to decide who will be most competent. Now suppose the teacher intervenes by saying that there are many different skills that are involved in the new task. The teacher names those skills and shows why they are relevant to the new task. The teacher specifically explains that "No one person is going to be good at all these skills; everyone is going to be good at at least one."

This sounds simple; it is actually a profound alteration in the social situation because it alters expectations for competence at the new task. The participants accept the proposition that many different abilities are relevant to the new task, and that different students will be good at different aspects of the new task --they will conclude that academic status is not the only basis for competence on the new task. The stage is set for students who may have low academic status to form favorable evaluations of themselves and for peers to form favorable evaluations of the low status student's contribution on at least some aspects of the new task. Once this favorable evaluation has formed, on many new collective tasks, the low status students will be much more active and influential than if they had not had this experience. Instead of a uniform set of low expectations for competence there are now a set of mixed expectations for the low status student--some favorable and some unfavorable. The net result is a real improvement in their position relative to that of the higher status student.

Research Evidence

This intervention in the process of status generalization was originally developed by J. Stulac in a laboratory study of children selected on the basis of having high and average estimates of their own reading ability. Although they did not come from the same school Stulac devised a way to inform them of their relative score on reading. She then introduced a creative problem solving task often used in classrooms, called "Lost on the Moon" (Hall, 1971). This task requires the group to imagine that they have crash landed on the moon. There are only 13 objects which have been salvaged from the wreck. The group must come to concensus on the rank order of importance of these 13 objects for their survival as a group. They are told that experts from NASA have rank ordered these objects in the best possible way. Before the experimental groups had the chance to discuss this task Stulac informed them that many different abilities were important to a good group solution. These included "listening carefully to what other people have to say," "thinking of new and original uses for objects," "getting the group to move forward on their task," etc. She said that no one person would be good at all these abilitities, but that each person would be good at at least one. Furthermore, she said that reading had no relevance to this particular task since all the objects were pictured on cards for the students. She then had the four person groups made up of two Higher Readers and two Average Readers discuss and reach concensus on the rank order of the 13 objects. After they had finished she presented them with a new and different collective task. This was the standard game task described in Chapter III, called Shoot-the-Moon which has been used throughout the program of status research. On the Shoot-the-Moon game, the four-person group must make repeated decisions. Unless something is done to interfere with the process, one may expect readers of higher perceived ability to dominate. Stulac's results showed that the Average Readers were significantly more active and influential on the new collective task if they experienced "Lost on the Moon" defined as requiring multiple abilities than if they were in the control group where they simply discussed the "Lost on the Moon" task without any definition of the abilities involved (Stulac, 1975). Stulac demonstrated that one can effectively interfere with status generalization by defining multiple abilities as relevant to a task[1] thereby preventing students from assuming that only academic or social status will be a relevant basis for predictions of competence. Once this has occurred, more favorable evaluations for low status students will affect their behavior on subsequent tasks.

Rosenholtz carried this treatment into classrooms. In a school with children of a wide social class range (all Anglo white children), she brought a one-week version of this treatment called the Multiple Ability Curriculum. The Multiple Ability Curriculum went much further than Stulac's treatment. It lasted a whole week for an hour per day and was carried out on fourth grade children who had known each other for some time and who had many opportunities to make evaluations of each other on reading ability.

Her preliminary study showed that in this rather traditional school which emphasized ability grouping and competition, the students showed a high degree of agreement on their ranking of each other on reading ability. In untreated four person groups of mixed reading status, High Readers were extremely dominant. It was often the case that both the readers with higher relative reading status were more active and influential than both the readers with the lower status. This is the study described in Chapter III.

---

[1] Note that Stulac also defined reading as irrelevant to Lost on the Moon. This additional step is not always desirable in a classroom setting. Rosenholtz later showed that a multiple ability treatment will be effective even when nothing is said about the relevance of reading to the collective task (1977).

The Multiple-Ability Curriculum offered a whole series of tasks as representative of three different abilities. The curriculum made explicit an important general lesson: There are many human abilities children and adults use in solving problems in life. The three abilities Rosenholtz selected as examples were Visual Thinking, Reasoning, and Intuitive Thinking. In each case, she showed a film strip of how people use each of these intellectual abilities to solve problems. Following the presentation of each film strip, children were assigned to heterogeneous groups. They were told that they were about to carry out a task which used the ability under discussion.

One adult sat with each group to explain the games and to make sure that each student had a satisfactory to successful experience. These tasks were carefully engineered so that self-fulfilling prophecies could not take place while the Low Readers were gaining more favorable evaluations of their competence. One way this was done was to require students to guess the answer to the problem only when it was their turn.

"Guess My Rule" was one such task described as an example of Reasoning Ability. Materials included a circle of yarn placed in the middle of the table, a stack of cards with small and large circles, squares and diamonds of blue, green and red, and a stack of rule cards each containing a rule telling which symbols belonged inside the yarn circle. "All four-sided objects" or"All shapes small and green" were two such rule cards; these cards were written partially in picture symbols. One student held the rule card so others could not see it. The students then took turns in putting shapes inside the circle, asking "Does this fit the rule?" After receiving a "Yes," "No" answer from the rule card holder, that person was entitled to one guess as to the rule. As the game progressed, the collection of symbols fitting the rule and left inside the yarn circle yielded more and more clues as to the rule. After someone had guessed the rule correctly, the next person around the table became the "Rule Card Holder," a position of power. Thus, it was impossible for one child to dominate this game and for another child to be left out. The logic required was challenging; and teachers were often quite surprised to find that students who are not good readers have excellent powers of logical deduction.

Another way of preventing self-fulfilling prophecies Rosenholtz used required each person to make a contribution before the group product was created. One task of this type was part of the Visual Thinking series. Each child held a 4" x1"x1" block of wood. On each long flat surface was glued 1/5 of a Snoopy picture. The children could not show each other their piece. The adult held one of the blocks and started by describing her part of the picture on one side of the block. This gave the group the cue as to which side of their block belonged in the picture. They each, in turn, described their block until it became clear whose block belonged where in the picture. When they thought they had it figured out, each member would put down a block in place and a picture appeared, all assembled. These Rosenholtz tasks are all thoroughly challenging; adult groups have a good deal of difficulty with them because they are not as willing to make guesses as children are.

This curriculum went on for one hour each day for a week. Groups were recomposed with new members after each task so that a wide variety of classmates worked together. Following this experience, the effect of the curriculum was measured in two ways. In order to see if new, more favorable evaluations had developed for Low Readers, each student rated their own ability at Reasoning, Visual Thinking and Intuitive Thinking. Results showed very few negative self-evaluations; the range was from "average" to "superior." The self-ratings of High Readers on the new abilities were no higher than those of the Low Readers.

The second measurement of effect was the standard game of Shoot-the-Moon. In the results, the Low Readers who had experienced the curriculum were significantly more active and influential on the new task than those Low Readers who were studied in untreated classrooms. Behavior was not really equal status in these groups in that there was still a tendency for High Readers to be more active and influential. But the advantage of the High Readers was greatly reduced by treatment (1980).

Application of Multi-Ability Treatments

It is neither difficult nor expensive for the instructor to define a collective instructional task as "Multi-ability." It does, however, require a rethinking of the skills and abilities necessary for the task given to groups.

There is no "correct list" of human abilities; it is a problem of analysis and a new way of thinking about human competence. If the teacher really believes that students can be arranged on a single dimension, running from "intelligent" to "unintelligent" and that a student's skills in conventional academic subjects like reading and writing are an adequate index of how intelligent he or she is--then it will be very difficult to carry out a multi-ability treatment. If, however, the instructor takes a fresh look at intellectual abilities as they are used in solving challenging mental problems in adult life rather than in conventional classrooms, it becomes much easier to see that one can pull out distinctive new talents. For example, a science task in the schoolroom may seem to be nothing other than comprehension of a textbook chapter, but an actual collective science task in the adult world of work involves reasoning, creativity, mechanical inventiveness, precision, patience, keen observation etc.--all in addition to conventional skills of reading and writing.

As soon as the teacher realizes that it is a matter of how one defines the situation, many common classroom tasks can be analyzed in this fashion. The students themselves are quite capable of learning to pick out the multiple abilities involved in a task, once they are given the idea by the instructor.

With the caution in mind that my examples are not to be taken as the preferred list of human abilities and skills, let me give a few more suggestions. A teacher of English literature might easily define a group task of interpreting the motives of a main character; relevant abilities might include understanding why people behave the way they do; going over the text with great care to glean additional clues; and finding a good way to phrase the group's answer. Manipulative science tasks are easily seen as requiring multiple abilities such as keen observation, precise manipulation; careful data recording; hypothesizing causes and effects; and writing up the report clearly and concisely. In social studies many assignments lend themselves to a multiple ability definition because they involve so many visual, interpretive and artistic akills.

With younger children, it is often possible to provide multiple ways for working through the problem--drawing a picture of how something works is as good if not a better way of communicating an answer than a written verbal description. With older students working on research papers, there are so many analytic, library, writing and editing skills that are relevant, that it should be quite easy for the instructor to spell out a long list.

Even tennis instruction can be defined as involving multiple abilities. A tennis instructor, of my acquaintance, who wanted to avoid beginning students' withdrawal from the class because they felt they were "no good at the sport," redefined the abilities necessary for the game. He used groupwork with each group working a different subskill which he carefully defined as a separate aspect, such as "serving," "placing yourself on the court to receive the ball," "use of backhand," etc. When the group had every member up to criterion on the practice drill of the new skill, they proceeded to teach other groups the skill they had mastered. Attendance at the tennis class was greatly improved by this multiple ability application of groupwork.

Implied in the above examples is a selection of a group task on which it is possible to display different abilities.

Care must be taken in constructing a multiple ability task for groupwork. It should be one which the teacher sees as actually involving different abilities and skills. If she/he chooses a task requiring every member of the group to read materials and to carry out some operation before participating in the group--then the student who is a poor reader may be so handicapped that he/she will never perform successfully in this task. If, in contrast, the teacher defines reading the materials as only one incidental step in task completion and makes it clear that it is perfectly acceptable for one person to read the materials and explain them to the others, then the poor readers will be able to make some satisfactory contribution on one of the other skills in the task.

In introducing tasks, it is essential to take the time to spell out abilities. Although it may seem awkward, it is very effective to use Stulac's wording, "Everyone will be good on at leastone of these abilities. No one will be good at all of them." Students themselves quickly adapt to this way of breaking up their own thinking about human "smartness."

Short-term vs. Long-term Treatment

If you want to achieve active participation and to avoid having behavior solely determined by status differences within the group for a particular learning task, this way of defining the situation may be all that is necessary along with a careful choice of group task. Examples of such short-term treatment might be the introduction of a science curriculum involving laboratory work or learning centers, teaching computer skills, a psychology class in high school, a speech class in college, or an adult education class in some specific set of skills.

If the purpose of the groupwork is simply to achieve active learning on a particular curricular task, then the techniques just described will be useful. If, however, the purpose of groupwork is a long-term improvement of low general expectations for competence held by students in a classroom, then much more fundamental changes in instruction will be necessary. The distinction is one between equalizing expectations for competence on a particular task vs. improved expectations for competence and more active learning behavior over a wide range of subjects and tasks. If you are only teaching a class for single purpose, then you need only worry about defining that task as multi-ability. If you teach different subjects, many of which require some application of conventional academic skills such as test-taking, reading and paper-writing, then you cannot expect a transfer of improved expectations for competence from the special multi-ability task to conventional academic tasks. Unless steps are taken to intervene, the students will assume that their previous grades in such activities are the most relevant basis for predicting their performance on what they see as conventional tasks.

Both Stulac and Rosehnoltz showed that the multi-ability definition of the situation would transfer to a game task like "Shoot-the-Moon." But the students had no previous experience with such a task. In a real classroom, when the teacher takes up reading and math and sets the students to work on seatwork according to their membership in three ability groups, there is no reason to expect that newly defined abilities will affect expectations for a math task where one's ability group is a much more relevant way to decide how competent one is going to be. If you want some transfer of improved expectations to math activities, they must be redefined, so as to allow people to perceive that there are different math subskills which operate and which cannot be predicted from previous grades.

The task and the evaluation structure of conventional academic subjects must both be changed. Obviously, one cannot go on with the use of ability groups, with relatively permanent membership. Such techniques will quickly undo the good effects of participating in a multi-ability task. The students will be reminded of the instructor's evaluation of who is expected to be competent on a task organized into explicit ability groups.

These and other changes in the task and evaluation structure are part of the concept of a Multi-Ability Classroom, as distinct from a Multiple Ability Treatment. The Multi-Ability Classroom is a long-term treatment of which groupwork is only one part. The instructor should consider a Multi-Ability Classroom when students show big differences in academic skills--as in many racially integrated or bilingual classrooms.

I want to postpone discussion of the Multi-Ability Classroom until later in this book. First the reader will need to learn about teaching students how to work together in groups and about differentiating roles in groupwork. The Multi-Ability Classroom is designed for the most challenging teaching situations; and it requires very sophisticated groupwork as well as associated changes in task and evaluation structure. It is in some sense, the capstone of the concepts and techniques in this book.

To summarize, if your primary concern is to soften status effects in particular groupwork tasks, you should consider the multiple ability treatment. If, on the other hand, your primary concern is to treat the problem of low general expectations for competence on the part of low status students in a heterogeneous classroom, then groupwork with a multiple-ability definition of the task is only one of a number of fundamental changes which must be made to change the underlying views of human ability.

Chapter IV

Designing the Social Situation

There are a number of solutions to the problems posed in the last chapter. Which solution the teacher chooses has to do with an analysis of teaching objectives. Suppose that you want to increase the task engagement of your low achieving students. You are not particularly concerned about the affective goals of groupwork or the acquiring of skills for working in groups. It is quite possible to avoid the problems of status generalization by the simple strategy of designing a situation in which group members are not really engaged in a collective task; there is no single group product that emerges from their work. Although the task requires the members of the group to practice their thinking out loud with each other and to use each other as resources, their interdependence is limited because they turn out individual, not group products. If the task is designed this way, one has all the advantages of active practice and feedback from fellow students without having set the stage for self-fulfilling prophecies based on status characteristics. It has the additional advantage of "co-opting" the low-achieving student and giving him/her the needed help to benefit from the work and to complete the required task.

On the other hand, if your objective is to teach students how to work together in a civil and harmonious fashion, as is frequently the goal in a desegregated classroom, then it will be necessary to make a much bigger investment of time and training in order to teach the students new ways of behaving. If your goal is to change expectations for competence of low-achieving students for the better, then truly collective tasks have what you need and are essential for the change process. Preparing students to work in truly collective tasks is a major investment, but well worthwhile as the data we have collected show. There are a number of recommended strategies for gaining your ends while preventing self-fulfilling prophecies based on status.

This chapter discusses the strategies of limited interdependence. These strategies have the effect of gaining the instructor's objectives without producing undesirable side effects of unequal participation and interpersonal unpleasantness. For many intellectual objectives, these strategies are preferable. In the chapter that follows I will take up the strategies for truly collective tasks which have the impact of preventing or modifying problems of status and of achieving civilized dialogue among the group members. In each case I will try to present workable examples of what instructors of students of various ages can do in the classroom to enact these strategies.

Limited Interdependence

The previous chapter painted a grim picture of the cutcome of many group tasks. Am I trying to discourage teachers from groupwork? No; there are such important advantages for certain teaching goals that it is worthwhile to persevere and try to design group tasks avoiding these undesirable outcomes. I have introduced a theoretical framework to give a basis for the following principle:

> The teacher can avoid setting the conditions which activate expectations for competence based on academic or social status.

A reexamination of the conditions for the phenomenon of status generalization suggests just how this might be done while still deriving the advantages of groupwork.

Avoid tasks which are highly interdependent. If the task demands group interaction but is not so interdependent as to force the group to make a public rejection of someone's ideas as unuseable or of no importance for the group product, then many of the undesirable side effects discussed will disappear. "But," the teacher will ask, "I thought you were arguing for groupwork. If you are going to pick a task where the members don't have to deal with one another, aren't you defeating your own goals?"

Here is the key question. It all depends on the instructor's goals. Some of the instructional objectives discussed in Chapter II can be achieved by a task structure which is not highly interdependent. For example, one can provide much more active practice at new concepts and ideas for individual class members; one can increase the engagement of low achieving students by designing a situation involving interaction; one can increase the use of oral language in a bilingual classroom without the necessity for a high degree of interdependence.

The teacher can design the social situation so that students are required to talk and confer with each other without their having to come to concensus on the single best answer or problem solution. If a design for groupwork can achieve these goals without running the risk of activating irrelevant expectations for competence, then it makes a good deal of sense to do so. None of the goals just listed demands that students reach concensus. Maintaining a difference of opinion rather than feeling forced to come to concensus is often intellectually desirable, provided that there is some way for the student to evaluate the quality of the answer he/she has chosen. This process of evaluation does not have to take place in the context of a group of peers. After the student has conferred and arrived at what he or she thinks is the best answer, the teacher may either provide criteria for evaluation or may give the student private feedback by correcting the proudct. The teacher may also bring out that there is more than one answer to the problem.

There are several different methods of achieving limited interdependence. Students may confer with one another on a collegial basis, but turn out the final product on an individual basis. Students may be allowed to make short-term use of each other as expert resources, allowing one student to request assistance from another whom he or she feels is more expert at the problem at hand. Alternatively, the group task may call for a division of labor where each person is responsible for part of the task; the interdependence may be limited to planning the initial project division of labor and editing the final product. Lastly, the task instructions may call for taking turns in such a manner that everyone gets a chance to have their say in a relatively mechanical fashion.

Practical Examples

Thus far I have been talking on such an abstract level about concepts like interdependence, collective tasks and division of labor that is is important to stop and take time to give some more concrete examples of what I am talking about. In each case these examples are drawn from classrooms where I have seen them work well.

Conferring with other students. When the teacher wants students to work through a new set of concepts or to improve skills through practice she/he often assigns an exercise. If the topic is social studies, the students may be learning to apply map skills. If the topic is history, the students may be learning how to see events in terms of economic interpretations. If the focus is one of improving reading comprehension, the teacher may want the student to work through a series of questions on the passage they have just read. If the topic is mathematics, it may be desirable to take the new concepts and operations and use them to solve some applied mathematical or arithmetical problem.

Teachers who have goals like this in one or several subject areas may use a strategy of limited interdependence by assigning an exercise to be completed by each student. Students are allowed to confer on the assignment before doing their own exercise. In this case, the student is still individually responsible for the completion of his/her own exercise, paper or project, but has had the advantage of being able to talk it through with someone else. With younger students the instructor may want to set up a specific conference time before students can start writing on their papers. This will be sufficient to prevent one student just taking over and doing the paper for another student.

More important than this precaution is the preparation of students for this kind of collegial behavior. In this case students are acting as resources for one another. Some of the desired behaviors for this relationship are listening carefully to what another person is trying to say and taking the time to explain something carefully to someone else rather than just doing it for a fellow student.

It is not a particularly good idea to allow friends to work together. Friends, as every teacher knows, are likely to chatter and "fool around" rather than get their work done. That is because there is a difference between the nature of a friendship relationship and the more formal business-like collegial relationship that is desirable in this application.

Certain students may be more valued resources than others because they are expert at this kind of task. These resource students can be spread around the class so that they are available to weaker students. Note that a student who can function as a valuable resource in one subject may not be a resource person for another subject; be careful not to reinforce a general academic status order by having the best readers always function as resource persons. The student who functions as a resource has much to learn from explaining to others. The weak student may actually understand the explanation better from a peer than from a teacher.

The teacher has the responsibility of evaluating the student's individual paper and should give feedback to the student so that he or she knows if they have gotten what they should out of the exercise or if they should redo part of it. In this way, the teacher can make sure that no student is left behind by having conferred and received poor assistance from someone else.

Once students learn how to confer in a constructive fashion, this basic format can be used again and again for various exercises. I have seen classrooms make consistent use of this method for all different subject matters. The following are important steps of preparation for this form of teaching: 1) selection of tasks which can benefit from another persons' ideas or explanations, 2) deliberately composing the groups which will have the job of conferring with each other, 3) making it clear to students that you expect them to make use of each other, and 4) discussing, reinforcing and modeling of behaviors that make a good collegial relationship.

Learning centers and science activities. The use of Leaning Centers where students are expected to rotate through each Learning Center and carry out the activities with the materials set up there is a popular method of teaching today. Particularly appropriate is the use of such Learning Centers for scientific problem solving where the instructor wishes the student to grasp scientific concepts through active manipulation of materials and problem-solving. Such problem-solving is often greatly assisted by peer interaction. One student's observation about what happens to the materials is of great assistance to another in seeing to the core of the problem. Furthermore, as the students talk about the problem they practice the use of new scientific vocabulary.

As in the first example, in the case of limited interdependence, each student can be responsible for a worksheet based on the activities at a given Learning Center. The instructor goes over the worksheet to see if the student is grasping the concepts. At the same time the following rules are made explicit: Every student has the right to call upon any other student at the Learning Center for explanation and assistance. Also, everyone has the duty to assist a fellow student who makes a request for assistance. The individual worksheet has the advantage of assisting the teacher in monitoring the learning process and is an excellent method for making sure that each student is completing the task at each Learning Center.

This is the technique used in a bilingual math and science curriculum developed by E. De Avila for third and fourth graders. In this application, instructions for the tasks are written in English, Spanish and pictographs and are displayed in connection with each Learning Center. There is a limit on the number of children allowed at each Learning Center; but each student must finish the task at each Learning Center. The use of these two rules creates a situation where the particular group at a given Learning Center varies in composition so that children who are dominant Spanish speakers find themselves working side by side with dominant English speakers or children who speak a dialect made up of both languages. The stimulating nature of the manipulative tasks produces a good deal of interaction and comment as children do much working together on a momentary basis and a lot of watching and "kibbitzing" of each other's activities. Thus children receive much active practice in both languages; their eagerness to communicate about the fascinating tasks impells them to try and use both the new scientific vocabulary and to communicate in their weaker language.

The complexity of the tasks forces them to refer back to written instructions quite frequently. There are a number of children who do not yet read; but the rule about being able to ask for assistance takes care of this problem as long as there is a least one person at a Learning Center able to read and thus assist a fellow classmate. In these classrooms, I have often seen teachers who make sure that there is at least one reader at a Learning Center where non-readers are working. Through the use of these written instructions, the weaker readers also gain some practice at learning reading and writing; the worksheets call for them to make some attempt to write out answers, even if they have to accept assistance. The teacher and aide circulate between Learning Centers and often give assistance on the worksheets.

In this particular culture of the Chicano or Mexican-American child, it has not proved necessary to teach the children how to assist each other in a constructive and helpful manner. Here the teacher has only to remind the children that they are supposed to help each other; they already know how to do this quite well. In an upper middle class Anglo setting, it would probably be necessary to teach these behaviors.

Division of labor. If the task instructions divide up the job so that each person does a very different part of the task, the group is interdependent, but in a very limited way. The simple expedient of having each student in possession of part of an answer or product and setting a rule about taking turns in making a contribution of that part, will guarantee that each has a chance to make a valuable contribution to the group. For example, a group is studying geography and each member has had the opportunity to learn about one relevant sub-topic such as "agriculture," "topography," "climate," each member contributes important relevant information to the group. For a detailed description of how this method works, see Eliot Aaronson, The Jigsaw Classroom. Aaronson sees an analogy between this kind of limited interdependence and doing a jigsaw puzzle where participants each hold different pieces (1978). The analogy is an apt one.

In designing such a task, it is essential that students who are poor readers are thoroughly prepared to contribute their information; they may need a cassette or film strip in conjunction with written materials so that they will be thoroughly prepared to make a creditable contribution to the group. Otherwise, a weak contribution by a student who has academic difficulties will only reinforce his/her position in the academic status order of the classroom.

Small groups that are working on projects may divide the labor so that each member goes off and does research on some aspect of the joint product. However, it is essential to analyze the interdependence of the entire project. If the group decides on the division of labor, the nature of the topic, and evaluates each member's contribution in putting together the final product, then we have a task which has many sub-tasks with strong interdependence; the interdependence is limited only during the phase when people go off and do their research and individual write-up. The initial phase of deciding on the project and assigning the sub-tasks is actually strongly interdependent; it forces students to evaluate each other and will set the stage for self-fulfilling prophecies. Therefore, certain steps will have to be taken to prevent high status students from dominating that phase of the project.

A play where each actor has a part is a rather good model of a division of labor, where no person can be shut out of participation because the other members of the cast evaluate his/her contribution negatively or where the actor him/herself refuses to participate because of a sense of incompetence.

An excellent way of practicing conversation in a foreign language is to have small groups play out a scene such as a restaurant dialogue. Each person plays a role; perhaps the waiter, and two customers. The instructor provides a foreign language menu and a lesson on useful words and phrases for a restaurant setting. Each person must improvise and play the role in a foreign language. In this way every class member gets active practice in conversation in the foreign language. The teacher functions as a resource person and circulates between groups. After a period of preparation, each small group can perform for the whole group. The teacher then has the opportunity to note the common errors and build a lesson for the group as a whole on those errors.

Review of Limited Interdependence

Note the way I have analyzed each example in terms of the learning objectives, the composition of small groups, resources and materials, special behavioral skills necessary for the task, exactly the level of interdependence at each phase of the task, and the precise nature of peer and teacher evaluation. Of special importance is the analysis of new kinds of behavior which will be expected in the setting. Never assume that children or adults know how to work with each other in a constructive collegial fashion. Years of teaching adults at the graduate level have instructed me that this is never safe to assume. Not only should new behaviors be discussed and publicly specified, but students must have to have a chance to practice these new behaviors in such a way that the teacher or fellow student identifies for them when they are behaving "correctly."

It is essential to think of the role each person will play, even in the limited interdependence situation. Are the materials and resources necessary to make a contribution to the group self-explanatory and easy to obtain? If not, has the instructor seen to it that everyone knows and understands how to use these materials? If the instructor decides to rely on students as resources for one another to solve this problem, precautions must be taken so as not to constantly reinforce the idea that the best reader is the all-knowing expert who can clearly act as resource no matter what the task.

In thinking about the level of interdependence required, it is helpful to ask yourself: Will the nature of the task force peers to make evaluation of each other in such a way that certain people will be deprived of an opportunity to participate and others will dominate? If this is the case then the task qualifies as having strong interdependence, and deliberate steps must be taken to avoid self-fulfilling prophecies.

Finally, the teacher must spend some time worrying about evaluation of individuals or groups. If students confer at first and then produce individual papers, they will require some constructive evaluation on those papers. If the group product is to be evaluated, then the task qualifies as one which is, by definition, highly interdependent. If individuals are to provide some helpful feedback to each other in the process of conferring, then you are asking students to participate in your function of teaching; they must be coached in good ways to do this important task.

Chapter VI

New Norms for Collective Tasks

If students of any age are to work on collective tasks in groups where they must depend on one another, special steps must be taken to train them for this experience. The chances are that they have not had previous successful experience in collective discussion or other cooperative tasks working with people who are not personal firends or family members. The closest experience is probably team sports, but roles in sports are highly structured by rules of the game; and the coach and the referee have the last word about decisions.

In this chapter, the concept of "norm" is central. A norm is a rule for how people ought to behave in a given situation. Sometimes they are written and sometimes people just act as if everyone were expected to behave in this way. For example, students follow the unwritten rule, "Never report to the authorities on the misdeeds of your peers." Such norms are enforced by the threat of ostracism and disapproval from others in one's social group.

There are a series of written and unwritten rules or norms in traditional classrooms. They include, "Do you own work and don't pay any attention to what other students are doing." "Never give or ask for advice from a fellow student while doing an assignment in class." "Pay attention to what the teacher is saying and doing and not to anything else." "Eyes front and be quiet." When dealing with younger students, teachers constantly reinforce these norms and enforce them through punishment. By the time students are adults instructors of higher education rarely have to enforce norms through reward and punishment; these norms are so deeply internalized that students are quite unconscious of why they behave in class the way they do.

Assigning collective tasks to groups involves a very important change in these classroom norms. Now the student is supposed to depend on fellow students. Now they are responsible not only for their own behavior but to some extent for the group's behavior. Now a whole series of behavioral skills are relevant and acquire the power of norms in group discussion: "Ask for other people's opinions; Listen to other students; Don't be talking all the time; etc."

The teacher's role has also changed. Instead of lecturing, calling on individual students to recite, and having everybody listen or supervising individual seatwork, the groups now have the responsibility to carry out their own tasks. The teacher has delegated certain decisions about the content of the task to them. Other decisions are implicit in the task instructions which take the place of telling students what to do directly. The teacher becomes a resource person and a manager rather than a direct supervisor. Students take over some of the duties of teaching each other and some of the evaluation of performance. The teacher may evaluate the group product rather than the individual's performance.

It is important to realize the radical change in ordinary classroom practices Then one can begin to understand why simply composing students into groups and assigning them a collective task, without careful preparation, rarely works well. Even if expectations are treated as discussed in the last chapter, students will not be well prepared for constructive group discussion. After treatment of expectations a low status student will speak up, but he or she will not be better listened to than anyone else in the group. The group will still not know how to resolve conflict. Members may still prefer to be evaluated on an individual basis and fail to see the point of cooperative relationships.

Thus it becomes necessary to plan for a series of learning experiences which will prepare the students for constructive work in the group setting. Even after they have begun to work on academic tasks in collective groups, it will be necessary every once in a while to return to these norms, reinforcing them and refining the new skills for group settings.

IMPROVING GROUP PROCESS SKILLS

Using Social Learning Principles

Not only are most people unskilled in working in groups, but they are blissfully unaware of the behaviors that make for good group process and the troublesome behaviors which bring groups to grief. Therefore the first step in improving these skills is to make participants aware of the specific behaviors in question; they must be able to recognize in an objective way when such behavior has occurred. These behaviors must have a label so people can say when one of them has occurred and note and discuss the fact in an objective way. They must also have the chance to practice new desirable behaviors and to practice the avoidance of certain troublesome behaviors. It is highly desirable that when a person behaves in the particular way that has been labeled and is under discussion that he is reinforced for it, if it is positive, and made aware of the problem if it is negative. These are, in simple language, the principles of social learning theory developed so painstakingly in many, many experiments by Bandura and others (1969). These are extraordinarily useful principles whenever one is introducing new behaviors to children or adults.

There is more involved than social learning when the group skills are taught by the teacher in a classroom setting. Students are learning that these are effective ways of behaving if a good group product is to result. Furthermore, they are learning that these are desirable and preferable ways of behaving in groupwork situations according to no less an authority than the teacher.

Through this kind of a socializing experience students come to believe that this is the way they ought to behave in groupwork settings; they will be willing to apply some conformity pressures to peers to see to it that they also behave in these desirable ways.

Once an instructor has taken the time and trouble to teach group process skills, the groundwork has been laid for improved group functioning throughout the school year. With some reminders, exercises for special new skills and review of basic principles, the teacher can use groupwork in a variety of conventional academic content areas. If the students have internalized these new rules for behavior, many of the problems of collective tasks will be alleviated. As we shall show in this chapter, it is even possible to use special training for working in small groups to moderate the problem of status generalization.

Introducing Group Process Skills

In the classroom we do not have the ideal conditions of the laboratory study where a highly trained person supervises the practice of new behaviors and uses all of his/her authority to reinforce them. Instead, there must be some practical way for students themselves to assist in this process of behavior modification.

We have learned quite a bit about how to do this in connection with introducing multi-ability groupwork to desegregated classrooms (fourth, fifth and sixth grades). By working with the classroom teacher in introducing group process skills in a very challenging setting, we have been able to carry out techniques recommended by others and have noted systematically where the difficulties occur and why some things are so difficult for the students to internalize. As a result of this practical experience, there is a series of simple training experiences which I feel I can recommend. I have omitted those which, in the opinion of the project evaluator, were not successful.

In order to make students aware of behaviors which are critical in group process, we found the technique "The Four Stage Rocket," taken from Charlotte Epstein's book, Affective Subjects in the Classroom (1972, pp. 48-57) very useful. The basic idea of this exercise is to make the students realize that before a group discussion can "lift off" like a rocket, certain group behaviors must take place. As Epstein presents these skills they include: I Conciseness, II Listening; III Reflecting and IV Everyone Contributes. In applying this technique to desegregated elementary classrooms, we pictured these on a colorful posteras making up the various stages of a rocket, so that the children might grasp the idea that unless each of these desired behaviors occur, the discussion would not be successful.

After some kind of a suitable introduction which should involve the students in discussion of how they feel about working in small groups and some of their ideas about what makes for good and for unsuccessful group experiences, the students need to know why learning to work in small groups is important. If the instructor intends to make extensive use of small groups, then the student ought to know that they are being prepared for this experience. Students also need to know that in the work world, many important tasks are accomplished in the small group setting, so that these skills will prove of considerable practical importance to them.

The class is divided into groups of five or six students. The groups should be heterogeneous as to sex, race, and academic or reading ability. This can be best accomplished if the instructor has already composed names into groups and provides a map on the blackboard of who is in which group and where each group is to meet in the classroom. It is essential to be very firm and clear about your intention to have everyone work in the group assigned and where that group is assigned to work. If the class is immature, unused to such a procedure, or otherwise unpredictable, it is helpful to have a parent volunteer, teacher aide or even a high school student or two to assist you during this critical initial procedure.

Everyone is given the directions for a collective task, such as "Fallout Shelter." This is read out loud while students follow the directions of their handout. The object of this game is to select several persons to go into a fallout shelter. The group is to pretend that the end of the world is about to occur with a neutron bomb. Only seven persons can go into the shelter. They must reach agreement as a group on seven out of a list of 11 different candidates. The list includes people like an 11 year old student (male) from the students' school and a 40 year old policeman who refuses to be separated from his gun. The group must come to an agreement on the people to be selected for survival. (See Appendix A for directions on this task.)

Each group is given five minutes to start discussing this task. The adults circulate around the room, listening and taking notes but not interrupting the groups. They note down behaviors like not listening to each other, talking so much that others cannot participate, not really taking what another person said into consideration before giving one's opinion, rambling on rather than giving one's ideas in a concise fashion. The instructor then halts the groups and gives some feedback on having observed these particular kinds of problems. This should be done with good concrete examples (no names) taken from the discussions. This sets the stage; the students perceive the need to develop the four social skills described in the four stage rocket. It is at this critical point that the chart with the four stages can be introduced, thereby lessening the need for too much "teacher talk."

The students are then ready to have some practice in the new behaviors and learning to recognize them when they occur. The basic format for the practice session is the same for each stage of the rocket. There is an interesting and challenging discussion task which requires the group to come to agreement. There is a strict 5 minute time limit on each discussion period. One student in each group plays the Observer role. It is the Observer's role to watch for the particular behavior in question. Whenever he/she sees or hears an example of this behavior, it is noted down on a recording sheet.

Different students in the group get a turn to play the role of Observer; the role should not be restricted to high achievers or natural social leaders. We found that all the children were able to play this role provided that they receive careful instruction. For this purpose, the instructor or assistant should take all those who will be Observers for the coming session aside and show them how to recognize behaviors and record them on a scoring sheet (see appendix for suggested format of scoring sheet). After the discussion, the Observer gets up and reports for his/her group how many instances of the particular behavior ~~have~~ occurred in the group--just numbers of behaviors--no names. Groups are composed for each stage of the rocket; the entire exercise can be spread over several days of instruction.

For each skill pictured as a rocket stage, there is a built-in opportunity to practice the new behavior. For example, for the first skill, "conciseness," the group spends a second five minutes trying to come to concensus on the Fallout Shelter Task. The Conciseness is defined on a large chart as "getting quickly to the point and not beating around the bush." Each person is restricted to a 15 second speech. That instruction forces people to watch themselves for length of speech and to "make it short." Either an adult or a member of the group makes sure that the group only works for five minutes. Then the observer reports to the class as a whole on the frequency with which he/she observed concise participation.

The directions for the second stage, "listening," also require that each person talk for no more than 15 seconds. In addition, each person must wait three seconds after the person before has spoken before he/she may speak.

The third stage is "reflecting." This is defined as "repeating out loud to the group what the person before you said." For this five minute discussion the two rules from the first two stages apply. In addition, no person may speak until he repeats to the group what the person before him said. This is called reflecting. The person who had spoken before has to nod his/her head to mean YES if he/she thinks this reflection is right. No one may talk until he/she correctly reflects what the person before said.

The final stage, "everyone contributes," is defined as "all the people in the group have to speak." The rules of all three stages apply. In addition no one may speak a second time until everyone in the group has spoken.

Following this last practice session, there is a post-test of a five minute discussion. An observer in each group scores the four relevant behaviors and reports to the class as a whole.

Adjusting for your particular class. The number of tasks you introduce during this process depends upon how long your class takes to come to closure on a topic. A lively immature class with little practice at group discussion, may be able to continue discussing a task no longer than 10 minutes. If that is the case, and each stage of the rocket takes five minutes, then you will need a total of three tasks for the four stages and the two discussions required as pre and post-test. I have included in the appendix four tasks which can be used successfully with fourth, fifth and sixth graders. We selected tasks which required concensus, because we were training the students for that situation.

There are other dimensions which the instructor should adapt to his or her own class. It is possible to change the composition of the groups between each stage of the rocket. This is good in that it acquaints students with working with almost every other member of the class. Ordinary instruction practically never allows for this. It is not a particularly good idea to keep the same group for all stages. This does not teach the class that they will be expected to work with everyone; furthermore, some groups can develop an interpersonal struggle and it is wise to give them a change of membership. However, if the class is a difficult one to manage, changing composition for each stage of the rocket means quite a few chaotic scenes of transition if they have never had small group experience before. In this case, a good compromise might be to change group composition between days of instruction--even though several stages maintain the same group composition. The Observer can be changed between each stage, if desired, in order to give a maximum number of people the chance to function in this role. It is unwise to spend too much time on introducing overly complicated new tasks, "lecturing," the students on small group behavior, or making the students wait around until everyone gets organized.

One other caution is in order: The stage of "reflecting" may prove difficult for some sixth grade and younger classrooms. It is possible, if you think this might be the case, to substitute another necessary skill for this stage of the rocket. Or you might find a way of simplifying the task so that the student does not have to repeat everything that was just said, but something from what was just said. Epstein argues that a stage should not be omitted just because the students find it very difficult. She says that if they knew how to do it, they would have no need of special small group training. There is surely some merit in her argument; perhaps the students would learn to do better on this skill if they had more practice opportunities as they progressed in groupwork experience. The Four Stage Rocket can be repeated after the group has gained experience in repeated groupwork.

Following the Four Stage Rocket, our version of a group process curriculum provided still more opportunities to practice avoiding certain troublesome behaviors continuing to use the observer role. A new cooperative task which required concensus was introducted for this purpose. (See Appendix for description of more cooperative tasks which can be used for these training purposes.) With the use of a chart, we introduced the students to a set of behaviors which prove troublesome in group interaction.

Example of Possible Chart

TROUBLESOME BEHAVIORS

These are problems that come up between the people in the group and stop them from getting their work done.

1. attacks other people
2. won't go along with other people's suggestions
3. talks too much
4. not talking and not letting others know your ideas
5. tells stories about himself and keeps the groups from getting their work done

New groups were composed for this purpose. New Observers were appointed and trained. The Observer did not participate but scored the occurrence of some of these behaviors, and kept track of their frequency. This time the students had as long as 15 minutes to carry out a full discussion of the task.

With a training program such as this one, the students have learned how to observe and verbalize about certain desirable and undesirable behaviors in a way that is independent of the people who show these behaviors. Becoming more objective about group process is essential so that groups are self-critical and learn to enforce the new ways of behaving for themselves. They have also has some practice on skills like "listening" and "reflecting." The very "best" students may have the most difficulty with these skills because they are accustomed to having the most worthwhile thing to say (according to themselves and the teacher's evaluation) and are unaccustomed to listening carefully to anyone else but the teacher.

Thus far, I have selected behaviors which are important in both adult and children's groups. When working with adults, the Four Stage Rocket could be adapted. Groups could critique their own pre-test discussion, with the instructor highlighting central problems. For each skill, the task directions could be just as Epstein suggested. The whole group could discuss for five minutes while focussing their attention on how well they are managing a particular behavior. Following their five minute exercise at each stage of the rocket, they could stop and critique their own group processes. They might not require a separate Observer role to accomplish the same purpose as for the younger groups.

There are other behaviors which we found useful for training. These might differ according to the age of the group and the nature of the groupwork which is being planned. For example, younger groups need specific assistance in talking about how and when the group will proceed to task completion. They do not ordinarily stop to discuss strategies, agenda, and timing of final decisions. Evidently this is learned behavior, probably in extracurricular clubs and other organizations using some kind of formal procedure.

Americans of all ages evidently need some assistance in remembering to say honest and positive things about each other's ideas. College age students will even be reluctant to criticize each other's ideas. These further behaviors can be practiced using the format recommended above. Alternatively, a facilitator may be appointed in the group, whose specific job is to attend to the new aspects of group process. The use of a facilitator moves us on to the strategy discussed in the next chapter—the use of different roles in groupwork. Both strategies are effective in a training program.

Below is a list of behaviors which we have found useful in training groups. Any of these behaviors can be emphasized at any time during the use of groupwork, by including them in the initial phase of the training program just described, by introducing them in connection with a facilitator role, or by asking groups to become self-critical about them at a much later stage of groupwork. The language used in this list is simplified for the age group we worked with, but there is nothing childish about the content. Adults need to work on many of these same skills.

WORK BEHAVIORS: ways which help to get the group's work done.

1. has new ideas or suggestions
2. asks for or gives information
3. helps to explain better
4. pulls ideas together
5. finds out if the group is ready to decide what to do

HELPING BEHAVIORS: ways which help the group to keep working smoothly together.

1. helps people get together
2. brings other people in
3. shows interest and kindness
4. is willing to change own ideas to help the group
5. tells others in a good way how they are behaving

NORMS FOR EQUAL PARTICIPATION

The net effect of a training program for listening skills and for having everyone participate is a set of internalized norms for equal participation. When students feel that everyone ought to have their say and receive a careful hearing, the problems of status generalization discussed in the last chapter can be partly solved. As long as group members have internalized these new norms and have acquired some skills in the requisite behaviors, students with high academic status are not so likely to dominate the group.

In a laboratory study, Morris demonstrated the effectiveness of training procedures such as those involved in the Four Stage Rocket (1977). The focus of Morris' treatment was the establishment of special norms for solving problems through group discussion: norms for participation and listening. The students learned that these behaviors would contribute to a successful outcome for the group task.

Morris reasoned that the establishement of these norms would greatly soften the effects of status generalization by interfering very late in the process. Even if there were different expectations for competence; and high status members expected to be much more competent than low status members, the existence of these norms would weaken the tendency of expected competence to turn into domination by high status members. Instead, if everyone believed that all members should participate and all members should listen carefully to each other, the peers would act in such a way as to insure that low status members received a chance to participate and were given a fair hearing (Morris, 1977). Morris was banking on the social psychological phenomenon of enforcement of group norms on the behavior of members of the group. That group norms have a powerful influence upon the behavior of the group has been well documented (Sherif, 1936; Asch, 1952; Breer, Locke, 1965).

Morris also argued that the host experimenter as the organizational authority, who was seen as an evaluator, would help enforce norms because the members would see him as evaluating how well the group followed the norms. This would apply, of course, even more strongly in a classroom where a teacher trained students to use such group norms.

Morris' treatment was carried out in a laboratory setting with students of mixed academic status based on different perceived reading ability. He was very careful to teach the new desirable behaviors as well as the idea that such behaviors were effective for problem-solving situations. The treatment consisted of a set of explicit guidelines for cooperative group behavior. These included the following:

> 1. Say your own ideas;
> 2. Listen to others. Give everyone a chance to talk;
> 3. Ask others for their ideas;
> 4. Give reasons for your ideas, and discuss many different ideas. (Morris, p. 63)

Four-person groups were given the opportunity to discuss and practice these skills in a problem-solving situation. During the practice period, the host experimenter informed the group on how well they were following these rules and made specific suggestions as to how they could improve. The practice task for these groups was a decision-making situation called "Shipwreck." This task required the group to imagine that it was the crew of a ship sinking near a tropical island. On the ship were eight items of varying usefulness for survival. The stranded group was asked to arrange them in descending order of utility. After the group had arranged four of the items, the discussion was interrupted by the host who proceeded to give feedback as to how well the group was following the rules. After a brief discussion concerning appropriate behaviors as identified by the rules, the group continued to rank the items until they completed the task.

Following this practice task, the group went on to work on a parallel task, "Lost on the Moon" (also a J. Hall task) which also required them to rank order a list of objects for survival purposes. During this experience, they did not receive reminders or feedback concerning the norms for group behavior. Immediately following this discussion, the subjects played the standard status game, "Shoot-the-Moon."

In the analysis, the results of these groups were compared with those of students who simply experienced two collective tasks, "Lost on the Moon" and "Shoot-the-Moon" without the training sequence. Students with high reading status were much more likely to be highly active in the untreated than in the treated condition. In the untreated groups they had an average of 5.4 acts per minute while in the treated groups they only gave out, on the average, 3.99 acts per minute. The low status members in the untreated groups averaged only 3.57 acts per minute; they were not more active in the treated groups (3.21 acts per minute) (Morris, 1977). In treated groups the difference in the amount of talking between the most active person and the least active person was greatly reduced (Morris, p. 114). Thus, the effect really was to even out participation by preventing high status members from doing too much talking and too little listening.

It is critical to remember that this desirable effect took place on an unrelated task, Shoot-the-Moon. The group was never told to keep on behaving the same way that they were taught. They simply assumed that this was the best way to behave in another cooperative task. In other words, in the laboratory setting, the norm had begun to influence group behavior without the adult in charge having to say anything at all!

Still another important effect of the Morris treatment was reflected in a special measure of the quality of the discussion on "Lost on the Moon." Morris counted up how frequently treated and untreated subjects offered reasons for their ideas and/or asked their group members to explain suggestions. The treated groups were significantly more likely to show these behaviors than the untreated groups (Morris, p. 117).

This kind of a normative treatment does not eliminate the effects of status. The treated groups were still more likely to see High Readers than Low Readers as Leaders and were more likely to see the High Readers as having the best ideas (Morris, p. 111). Furthermore, the High Readers in treated groups were still somewhat more active than the Low Readers. Nevertheless the process of domination of high status members is greatly softened by this safe, simple and pedagogically sound treatment. One would not expect to see the effects of status altogether eliminated because nothing has been done about the difference in expectations for competence. What has happened is that these expectations have not been allowed to govern behavior unchecked, without interference from the new norms. Thus, at minimum, the high status members do not have the chance to dominate. Furthermore, the quality of the discussion is more rational and analytic.

TEACHING THE NORM OF COOPERATION

Students of education often ask, "How can you hope to install cooperative groups in classrooms in a society which is so competitive?" One way to answer this question is to explain that the teacher has considerable freedom and authority to design classroom situations which require students to work together in a cooperative manner. If the teacher requires this behavior, sets tasks which demand this behavior, and teaches people how to behave in such settings, students will be quite comfortable in conforming in the classroom situation. In the adult work world there are many such situations, even in so-called "competitive" American society. Examples may be found in task forces, political and organizational life, committees and clubs of all kinds. Actually, many classrooms in their emphasis on individual achievement and highly competitive grading practices are a caricature of competition in the adult world rather than a realistic preparation. Take, for example the teaching profession, where most teachers achieve tenure; and where there is no particular formal reward for merit. This may not be a cooperative structure, but it could hardly be called a competitive structure, if we take that word to mean a situation in which individuals strive against one another to gain scarce rewards.

What always makes debate about cooperation vs. competition so confusing is that the word cooperation has more than one meaning. Teachers use the word all the time, but as a young student once explained patiently to me, "Cooperation means you better do what the teacher says!" Cooperation in everyday language sometimes refers to conformity; in the literature on groups cooperation sometimes refers to interdependence of people in carrying out a task; at other times it refers to the reward system for the group--will the group or only individuals be rewarded as a result of activities?

In talking about cooperation we need to make clear precisely which features of the small group task we are talking about. Is it the means by which the group accomplishes the task or the goals of the activity; or the reward structure? Deutsch defined interdependence of goals as a group endeavor in which all individuals obtain the goal; movement of any individual towards the goal increases the possibility of others reaching the goal (1949). Interdependence of means occurs when the group is forced, by the nature of the task or task instructions, to work with each other in order to accomplish the task objective. The objective may not be a group goal but an individual product as in the examples discussed under the "limited interdependence" model suggested earlier in the book. In all of Deutsch's experimental studies showing favorable effects of "cooperation" the tasks were interdependent in both means and goals. In much of the research showing favorable results for competition, the tasks do not require exchange of information crucial for completing the task. Rather there is a group goal, but subjects work separately to achieve it (E. J. Thomas, 1957).

The above discussion is intended to highlight the concept of task structure. Experiencing certain task structures in and of itself has important effects on people. There is convincing theory and research to support the following proposition: When students experience successful outcomes on tasks with cooperatively structured means and goals, they come to prefer, desire and value this task structure. In other words, by introducing tasks of this character in the classroom, students come to prefer cooperative ways of doing things, i.e., they think that people ought to cooperate.

This effect is quite different from the effect of deliberately teaching children norms for behavior in small groups, discussed in the first section of this chapter. In the first case, children are learning norms which are specific to behavior in the group setting. In this second case, students are learning the benefits of cooperative work relationships without respect to how people should behave toward one another in those relationships.

The latter line of thought stems largely from the work of Breer and Locke who studied young adults in a laboratory setting. Their theory states the following:

> It is our thesis that in working on a task an individual develops certain beliefs, values and preferences specific to the task itself which over time are generalized to other behaviors in life...The theory constitutes an attempt to show in what ways differences in task experience can help us to account for differences in what men believe, prefer and value. (Breer and Locke, 1965, p. 10)

In these experiments, people who had experienced cooperatively structured tasks were more likely to express a wide range of cooperative values on an attitude and value questionnaire given some time after the task experience.

A Curriculum on Cooperation

More relevant to this discussion is evidence of this effect taking place in classrooms as a result of specific task experiences. Bloom and Schuncke, working with seventh graders, devised a curriculum to teach students that cooperatively structured means are an efficient and beneficial way to achieve many highly desirable, intrinsically interesting group goals. Regular classroom teachers carried out this curriculum in one of their social studies classes while continuing their normal activities in another social studies class.

The Bloom and Schuncke curriculum is of special interest to teachers because the tasks they used can easily be used by any classroom teacher who wants to achieve the same effect. There were five activities; each one provided information from experience to the student regarding the utility of interdependent task means and goals. This information was reinforced by the teacher after the completion of each task. They used the "Lost on the Moon" task we have referred to several times. But in this case, it was not simply used as a collective discussion task. Rather, individuals first worked separately in rank ordering the importance of the survival items. Their rank order was compared to the rank ordering made by NASA experts. Then there was a group discussion; the group opinion on the best rank order was then scored in comparison to the expert ranking. Finally, the individual scores were compared to the group score. Almost invariably in this task, the group score is superior to that of any individual's score. This occurs because of the exchange of information and because of the stimulation which occurs in a group. Thus, the students learn that in a survival situation, groups are more effective than individuals. The instructor must discuss this with the students; many Americans are under the impression that the talented individual's achievement is always superior to group achievement.

The curriculum also used another standard task from many human relation training programs--the Broken Squares problem. This puzzle cannot be solved satisfactorily unless individuals share their information. The students are divided into four-person groups. Each obtains an envelope in which there are pieces of cardboard for forming squares. When the teacher gives the signal to begin, the task of each group is to form four squares of equal size. The task is not completed until each individual has before him/her a perfect square of the same size as that held by others. The challenge lies in the fact that exchange of pieces must take place between the members before this goal is achieved. Furthermore, there are specific limitations upon the interaction:

1. No member may speak.
2. No member may ask another member for a card or in any way signal that another person is to give him a card.
3. Members may, however, give cards to other members.

The groups are given twenty minutes to work on this task.

This task is a precise analog to so many cooperative tasks; the individual must be concerned with giving rather than with taking or showing off individual achievement. As is always desirable if the teacher wants to be sure that students get the point of an activity, this task was followed by a discussion. The teacher elicited ideas of what they were doing during the game such as sharing,and working together. This was linked to the concept of cooperation. The class was asked whether they could have cooperated more fully and whether they could have completed the squares under the rules of the game without cooperation. (See Appendix for pictures of the broken squares, a task taken from Pfeffer & Jones, 1970).

The curriculum also employed simple jigsaw puzzles where each group member had a bag with one quarter of the pieces. They had to complete the puzzle without a picture of the product in front of them. In this case they could talk, but of course the task could not be completed without each individual contributing his/her share.

The fourth task of the curriculum was the preparation of a pantomine by each group. Each group was directed to choose an action which could be presented part by part (cues, scenes). The members of the group had to present these separate actions one by one in sequence for the class to guess the activity. Groups had to decide on the sequence and to rehearse the sequence. An example of such a pantomine might be shopping at the supermarket with the following sequence of cues:

Getting out of a car;
Opening store door;
Getting cart;
Choosing items'
Waiting in line at checker;
Paying for items.

I have presented these activities in some detail because they are simple, inexpensive and effective in providing an intrinsically interesting cooperative experience, where the students can be helped to focus on the way in which they are working together and each contributing their share or doing their part to make a successful product.[1]

The final Bloom and Schuncke task was a survival experience simulation, developed expressly for this curriculum. This experience underlined the lesson that human beings must work together in order to survive (1979).

In order to measure the effectiveness of this curriculum, one week after it ended, groups of students were called out of their classrooms to help develop a simulation activity. Students had never seen these adults before; and there was no connection in their minds between this activity and their curriculum experience. This task was a simulated seal hunt among Eskimos. The participants had 20 turns to catch seals on a board styled after Chinese Checkers. Unsuccessful hunters could "die" or "starve" and thus be forced to leave the game. There were strategies hunters could use if they banded together. They could adopt a set of rules for sharing the allocated seal meat stickers; they could adopt a set of rules for deciding where they could hunt and they could adopt a set of rules for determining who would participate in planning strategies. In an initial discussion, each group selected which set of rules they preferred to play with. These options reflected the extent to which the student would choose a cooperative as opposed to competitive task structure.

---

[1] The three tasks of Broken Squares, the puzzle and the pantomine are described using the manual, "Curriculum on Scientific Observation" developed by J. Bloom and J. Stulac for a six week experimental summer program, the Center for Interracial Cooperation. They were successful in that setting as well as in the Bloom and Schuncke curriculum.

There were two sets of treated groups. In one set, the four-person groups had the same membership all the way through the curriculum and the evaluation. In a second set of treated groups, membership was shifted between activities of the experiment and again, between the activities and the evaluation. In the third set of groups, the students had never experienced the curriculum. Both sets of treated groups were significantly more likely to select the rule options which involved interdependence for playing the game. Behavior during the game was observed and scored for "we" feeling and cohesiveness (group solidarity). Surprisingly, the control groups received a higher score than either of the sets of treatment groups (Bloom and Schuncke, 1979).

This is a significant study for classroom teachers. It shows how deliberate teaching through the experience of cooperative tasks of the value of interdependence will create in the students a preference for working that way even in a situation outside the classroom. The failure of students who had received this experience to behave in a more cohesive way strongly suggests that task structure alone does not solve status or problems of interpersonal struggle. As suggested in the first part of the chapter, the students will need to acquire behavioral skills for this purpose and/or the expectations problem will have to be solved.

Effects of Cooperative Groupwork

The classroom experimentation of three Israeli researchers shows what can happen when students are exposed for a long time to cooperative groupwork (both means and goals) and to specific training for behaving in groups. A group of teachers in Israel had participated in in-service training to teach them how to train students to plan studies cooperatively, to conduct productive group discussions and to help each other carry out and report on cooperative group projects on academic subject matter. There were 243 children in Grades 3-7 from classes of these teachers in the experiment. They were compared to 150 controls who had conventional classroom experience. There were two experimental evaluations of the children's cooperative behavior with peers. In the first experiment randomly selected children were called from the classrooms. They were given a series of hypothetical decisions to make where they were to divide some chocolates between themselves and their classmates. The decisions they made allowed the researchers to construct an index of varying choices the children made. There was an index of Altruism: How willing was the child to get fewer chocolates for himself in order to distribute more to group members; an index of cooperation: To what extent would the child maximize his own and the group's payoff? The index of competition yielded the number of times the child maximized his own payoff at the expense of the group; and finally the Index of Vengeance told how many times the child was willing to accept less as long as the group got fewer chocolates. Results showed that pupils from cooperative classrooms were much more likely to receive high scores on altruism and cooperation and to receive lower scores on Competition and Vengeance than the pupils from control classrooms.

In a second experiment, five-person groups of children from cooperative classrooms were compared to groups taken from control classrooms. Children were asked to recombine letters from an epigram into new words. They were told to try to work together at the start and in the middle of the 15 minute work period. Judges, scoring protocols of group behavior, agreed that there was significantly more interdependent cooperative behavior in groups from cooperative classrooms. They were more likely to share answers, offer help and request assistance, whereas the controls were more likely to hide their papers from one another and to reject assistance or refuse to give assistance. The social climate of groups from treated classrooms was also scored as less tense. These researchers conclude:

> Classroom learning appears to create social norms for peer cooperation. Mutual assistance, fair distribution of speaking privileges, collective decision-making and sharing of responsibility for task performance become accepted and expected patterns of behavior in the classroom. (Hertz-Lazarowitz et al., 1980).

NORMS AS A PRACTICAL CLASSROOM TOOL

This chapter has presented evidence and made recommendations to the teacher concerning the deliberate teaching of norms for the groupwork setting. There are new norms for behaviors in groups which can be effectively taught using the principles of social learning theory. Furthermore, there is a norm or preference for cooperative ways of doing things, which can be taught by experiencing intrinsically interesting and successful tasks which require interdependent means and goals. These two sets of training activities require tasks of a slightly different type. We recommended simple collective discussion tasks using an observer role (or group self-evaluation) for training group process skills. The work of Bloom and Schuncke suggests some very specifically designed tasks which have the lesson built into them that cooperation has a very special capacity to produce desirable results for certain tasks. Both these kinds of training activities and tasks have their place in an effective classroom training program.

The advantage of having the students internalize these norms is that they provide a way for the students to work effectively on academic tasks in groupwork. Although the tasks recommended here for training purposes have been non-academic in nature, these experiences prepare the students to move on to the effective use of cooperative task structures applied to academic goals. These training experiences have used tasks which are intrinsically interesting and produce satisfying outcomes. The students have thereby learned that groupwork is effective for accomplishment of goals and can be made interpersonally rewarding provided certain skills are employed. From the teacher's point of view much of the problem of classroom management is solved through the internalization of these norms. Students become willing to work with each other on assigned tasks, largely on their own. They will help to monitor each other's behavior through peer enforcement of norms.

After the analysis in this chapter, is it any wonder that when teachers abruptly compose students into discussion groups without any training and asks them to come to concensus, that students are unhappy and dissatisfied with the experience? Is it any wonder that the quality of the discussion leaves something to be desired from an educational point of view? The delegation of tasks to the group, in itself, represents a radical shift from conventional classrooms. New norms must be in place in order for groups to carry out their tasks in an effective and responsible fashion. Students must learn how to recognize those special behaviors which are desirable and undesirable for the groupwork setting. Furthermore, for many of the behaviors they will need practice because they have not had many prior experiences with successful give-and-take of group discussion with people who are not family or friends. Finally, they need to have some grasp of why collective discussion or working together is an effective and desirable way for human beings to achieve desirable ends. For all this to happen the teacher must invest some time in training activities prior to using groupwork requiring collective action. The investment of precious time has a payoff in terms of successful group functioning throughout the year; it is also a reasonable investment for the acquisition of important skills in work and in life in organized social settings.

Appendix

Chapter VI

Broken Squares

Materials:

Make one set of shapes on the following three pages per four-person group. Use stiff material of different colors--red, orange, yellow, green and blue.

Divide up shapes into four sets and place in envelopes with numbers one through four on the outside. Place all four smaller envelopes in one larger envelope for each group.

Purpose:

To introduce the practice of cooperation. Students participate in an activity that requires each member to contribute.

Procedure:

Divide students into four person groups using prearranged list.

Pass out packages of game pieces, one per member.

Give directions for game.

Instructions to the Group:

In this packet there are four envelopes each of which contains pieces of cardboard for forming squares. When you are given the signal to begin, the task of your group is to form four squares of equal size. The task will not be completed until each person has before his or her a perfect square of the same size as that held by others.

These are specific rules you must follow during this exercise:

1. No one may speak.
2. No one may ask someone else for a card or in any way signal that another person is to give him or her a card.
3. Members of the group may, however, give cards to other members.

Are the instructions clear? (Questions are answered)

Teacher gives signal, "Begin working."

Procedure After the Task

Purpose:

To develop the concept of cooperation so that students will understand the process.

Broken Squares (continued)

Procedure:

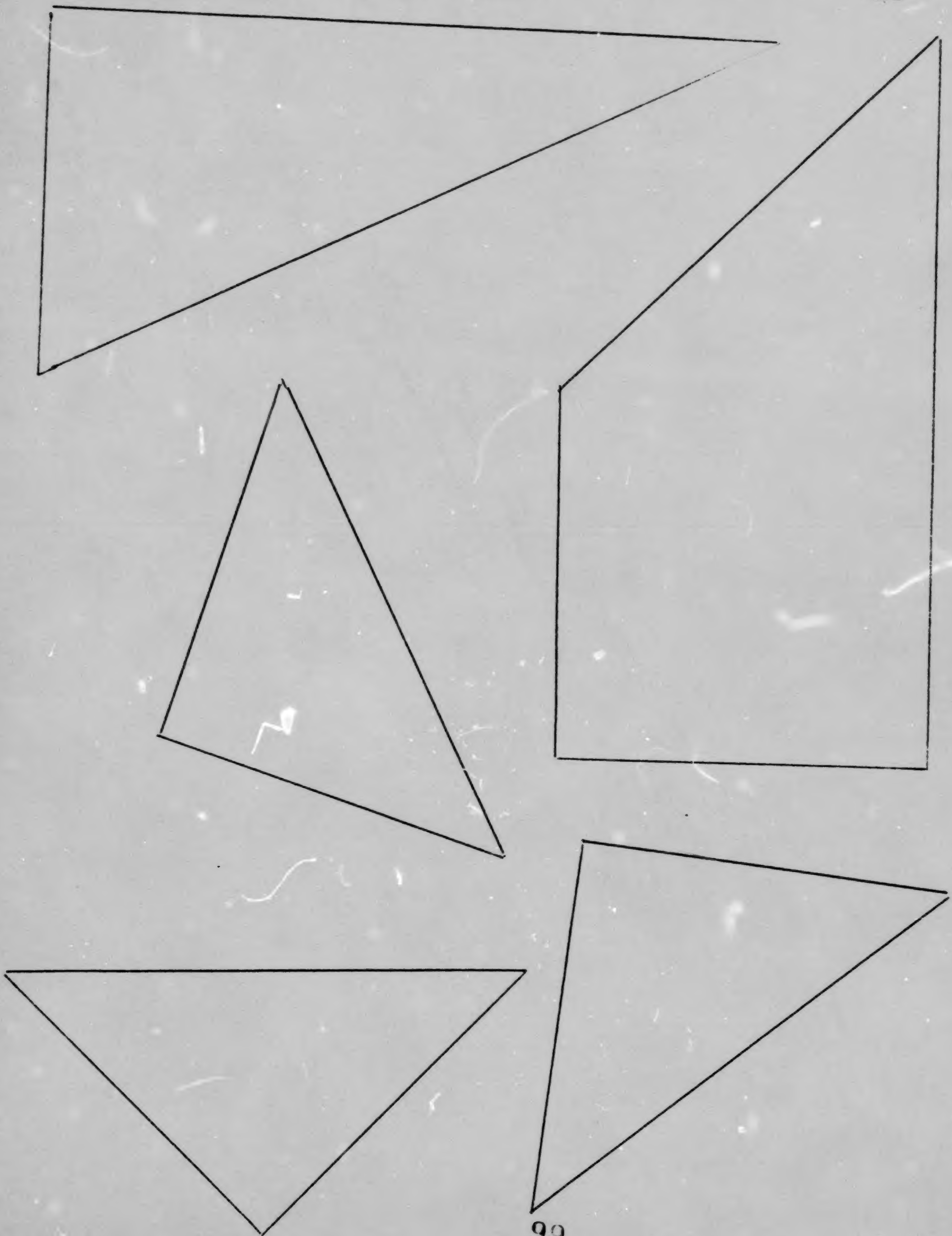
Discuss meaning of cooperation.

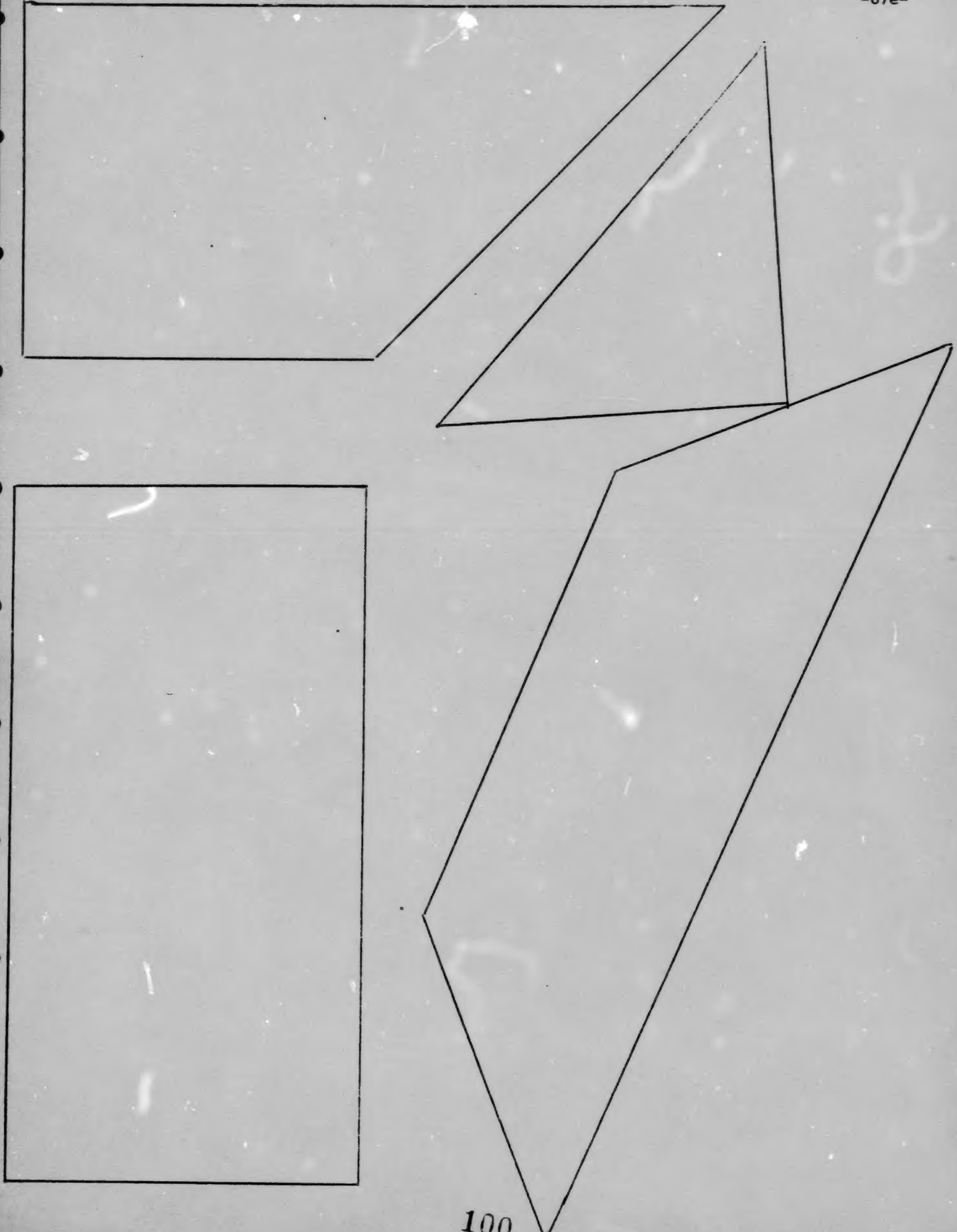
What did you do during the game? (Elicit idea of sharing, working together, etc. and link it to the concept of cooperation. Cooperation is defined as working together on a project to produce a group project.)

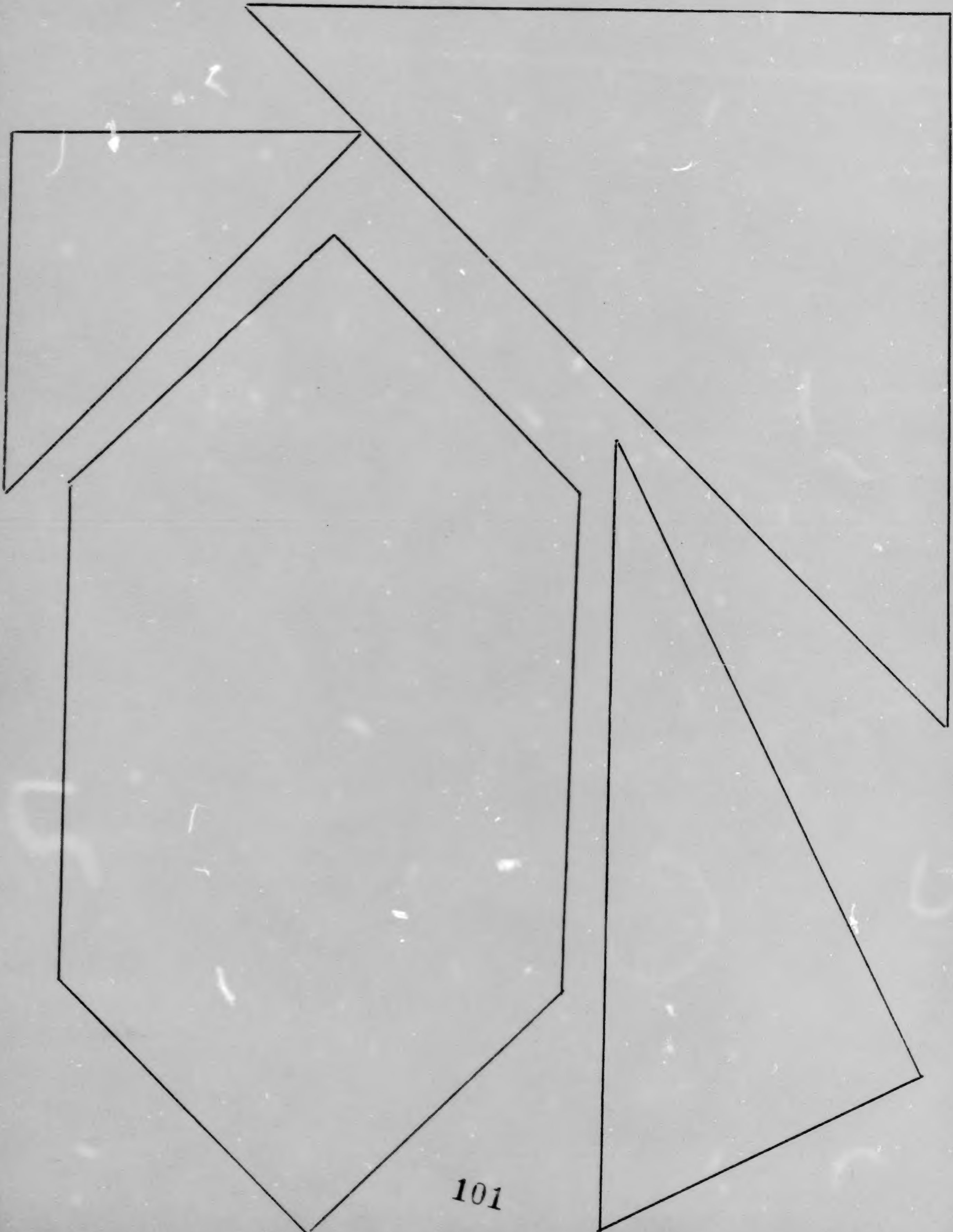
Could you have cooperated more fully?

Could you have completed the squares under the rules of the game without cooperating?

After discussion extend the idea of cooperation to future groupwork activities to be carried out in the class and to adult activities.







Chapter VII

Giving Roles to Group Members

Most human groups in adult work settings are different from the classroom groups we have been describing in several important ways. First, the work is often divided up between the members so that different people are responsible for different portions of the job. The may meet as a group only for initial planning or for assembling the final group product. In the second place, most work groups have some members who are executives or group leaders. These are specialized group members who are supposed to behave differently from other members and who have the right to tell other members what to do and even, in many cases, final responsibility and decision-making rights over the group product. These leadership roles do not arise spontaneously during the course of the group's activity; members are officially given these roles by higher authority in the organization. Such patterns of groupwork can be highly efficient and productive of satisfaction by group members. The instructor should consider using them in the classroom. Take first, the simple division of labor between different group members; if work is divided up this way, everyone has the comfort of a clear understanding about what he/she is supposed to do to contribute to the group product. Such clarity makes for happy and satisfied participants. A teacher may make the initial decisions about how to divide up the labor and how to pull together the final product.

There are advantages to the use of leadership roles as well. For one thing, these groups suffer less from status struggle than truly collective groups because the status order is clear and backed up by higher authority. The teacher has it well within his or her power to appoint group leaders for each of the collective task groups. Furthermore the teacher has the authority to specify exactly what the group leader has the right and duty to do with respect to the rest of the group members. From an educational point of view, use of these techniques has some drawbacks. A rigid division of labor plus strong leadership patterns can be associated with a lack of creative interchange between participants. If the teacher simply divides up the job into sections, and the group members have very little to do with each other, then they are able to profit very little from each other's final ideas. If group members are then asked to put their individual contributions together in a final report, that report is apt to be very poorly integrated.

If the teacher appoints a group leader who dominates the discussion, then members will tend to listen more to the group leader on the content of the task, even though other group members may have more valuable ideas. Furthermore the amount of interchange between group members is greatly reduced if the leader is constantly saying whose turn it is to talk. A classroom group leader with the power to direct discussion and make final decisions will often cause the group to give up and let the leader do the whole task.

How can the classroom teacher gain some of the advantages of clarity and efficiency from dividing up the labor and using leadership rules, without sacrificing the active learning which takes place during creative interchange? The answer to this dilemma depends on an analysis of the task the teacher has in mind. Recall, first, that the "creative interchange" will not be accomplished without some sort of special training and socialization of special norms for how to behave in group discussion. Secondly, keep in mind a collective task where everyone is working on the very same problem simultaneously is time-consuming and quite wearing on the participants. Thirdly, the collective task with no division of labor and no use of special roles, sets the stage for self-fulfilling prophecies based on status.

The general principle here is as follows: Concensus groups where there is no formal leadership and no division of labor are very costly in terms of interpersonal coordination, time, and the level of skill they require from each group member. They are likely to suffer from status generalization or from status struggle. Therefore, I recommend only short-term use of such leaderless groups. With proper training, these groups may be suitable for short-term tasks. If the instructor is designing longer-term projects for the class, then it is necessary to pull out those stages and phases of the task which are in most critical need of maximum exchange and creative problem-solving. These particular stages can use the leaderless group structure, while all the rest of the project can benefit from combinations of division of labor and special roles for different group members, including leadership roles.

Two of the stages of a long-term project which benefit from creative interchange are: the initial planning sessions and the integration and preparation of the final product. Initial planning sessions require open and creative interchange on several grounds. Obviously, the project's outcome is largely determined by the depth of the analysis of the problem and the decisions taken on what activities will lead to a good outcome. If the students are discussing a social studies project on Pueblo dwellings, their final report or presentation is only as good as their analysis of what are the important materials to be gathered and activities to be carried out by individual group members such as construction of models. At the college level, if the group is asked to do some library research on one aspect of alcoholism and write a group paper, the quality of that paper is dependent on the initial intellectual analysis of the problem and the revision of that analysis in the face of knowledge that participants gain in the course of their research.

In addition to this primarily intellectual reason for desiring a thorough and open discussion of the initial plans for the project, there is an important "group-life" reason for making this initial stage one in which everyone is a full participant. It is through this initial stage, that individual members develop a sense of commitment to the project and to the group. If one or more members feel that they didn't really have a hand in the planning of the project, they may feel free to let the more active contributors carry the burden of the work. If, in contrast, everyone feels that he or she had a fair chance to have a "say" in the initial plans and accepted the group decision only after arguing the issue and accepting or compromising in some reasonable fashion, then there will be much less problem of "letting the group down" by failing to do one's job. After all, the other members will feel free to say, "You took part; and you agreed that this was a reasonable way to look at the problem and do the job. So now you have to do your part!"

The preparation of the final report or outcome is also a time when the nature of the task requires an open interchange. Particularly, if the group has been through a period where each member has been away from the group doing some research or creating materials for the final product, the group needs to learn what each member has found out. Although some of this process can take place through reading and examining the productions of individual members, major intellectual benefits come from evaluating, analyzing and synthesizing what each person has learned so that the group as a whole comes to look at the problem in a somewhat different way than they did as individuals. This is a challenging intellectual task of integration. It is also a challenging interpersonal task, because it is never easy to take criticism and evaluation from others. Unless, some criticism and evaluation takes place, the final product of the group will be strung together in a mechanical fashion; the members will learn little more than they might have learned doing individual assignments.

LIMITED LEADERSHIP TECHNIQUES

In this chapter, I want to propose that even during these critical stages of planning and integration of groupwork projects, one can use a limited leadership role. This role is more that of a facilitator than that of a "boss" with executive decision-making rights. Everyone understands that the facilitator does not have control over the content of the decisions or discussion of the group. Instead, the facilitator has much more limited functions such as seeing to it that everyone participates or keeping the group on task and away from irrelevancies; or making sure that the group makes its clear decisions in the time the teacher has allotted.

The use of a facilitator has the advantage of efficiency because one member is in charge of seeing that the job gets done on time as well as the advantage of preventing status struggle and domination by members of the group who have high academic or social standing. No doubt, one gives up something in the way of a free and full exchange of the well-trained leaderless group, but like so many decisions made in this business of groupwork, it is a "tradeoff" of the relative advantages and disadvantages of each technique.

Assigning leadership roles. The instructor has the authority to assign a limited leadership role to a member of each group. If every group member is to accept the "facilitator" as a legitimate leader, then it is essential for the instructor to make this assignment of roles in a clear and public fashion. Both the person who is to be the "limited leader" and every member of his/her group must understand that the instructor has given authority to the person chosen for the role. Furthermore, the exact nature of the duties of the leader must be public knowledge, so that group members understand that the leader is behaving in a certain way only because he/she is expected to do so as part of the job. For example, if it is the leader's job to see to it that everyone participates, an attempt to tell an overly talkative member, "I think the group understands your point of view; we need to hear some other ideas," will be less likely to be taken as a personal insult; it will be supported by the rest of the group.

I have found that laying out the leader's role on a large chart and leaving it in front of the class helps to achieve this clarity and power of the teacher's assignment of leadership. When this is done, even the meekest student will tend to step forward and play the assigned role; and the group members will respond with respect.

Selecting students for leadership roles. Because teachers believe that many students do not have the capacity for leadership roles, they tend to select either the most successful student or the student who is obviously a social leader in the informal relations among the students. Selecting the "natural social leader" has the additional advantage of coopting possible threat from such students who are sometimes capable of leading a revolt against the teacher's ideas for a new instructional format.

I would like to argue against this common practice. If the leadership role is properly and publicly defined; and if students are properly prepared for any requisite skills they will need, a wide variety of students can play such roles as that of a facilitator. Furthermore, the oppprtunity to play such a role is a much-needed boost to the status of many students in the classroom who are regarded by their peers as meek, mild, and incompetent. In the case of females who are widely believed to lack leadership capability or in the case of minority children who constitute only a few class members and are unrepresented in adult positions of authority, it is essential to attempt to change the aura of powerlessness that surrounds them.

The reason, I would argue, that teachers believe that only certain children have the capability of carrying out leadership roles is that, under ordinary conditions, the leadership role is not properly specified by the teacher to the potential leader and to the class members. Therefore, the student is left to fall back on his/her other statuses such as "best student" or "social leader" to persuade the group to comply with his/her requests. Under those conditions, a student with ordinarily low or middling status in the classroom, will indeed have difficulty in persuading the group to do anything.

There is a further advantage in rotating the limited leadership role so that each member of the group gets the chance to play the role of facilitator. This gives every member a chance to play the role of the "other" and will do much to reinforce such important ideas as "giving everyone a chance to participate," and not going off on irrelevant tacks. It will also help to make every member feel like a responsible and participating part of the group.

Effectiviness of Facilitator Roles

The facilitator role has much to recommend it. Even without training, it will help to prevent domination by a high status member of the group, as we shall see in the next chapter. In this section, I will present some evidence for the effect of a facilitator-led classroom group gathered from the work of Mary Wilcox. I will also give, in some detail, the method she used for training the facilitators.

Wilcox demonstrated that it is possible to train fifth and seventh grade students from inner city classrooms to play the role of facilitator in small groups working without the teacher. Her study compared groups with trained student leaders to groups led by teachers and groups with untrained student leaders. Her discussion task involved a moral dilemma; the students had to come to agreement as to what was the best thing to do. Thus her task was highly interdependent; it demanded consensus from the group. Furthermore the groups were mixed on racial and reading status. If she had not interfered by using a facilitator role, the stage was set for domination by high status members of all-student groups.

Students in groups with trained student leaders were significantly more active than students in teacher-led groups or students working with untrained student leaders. Furthermore, the quality of the contributions of the members of groups with trained student leaders was more original and diversified than the quality of student response in groups working with teachers. Of especial interest were the teacher-led discussion groups. Students were less active; their responses were more conventional, partly because the teachers often felt it necessary to moralize whenever a student response failed to illustrate conventional morality. The result with untrained student leaders, as one might expect, was highly variable (Wilcox, 1972).

Wilcox training methods. In the Wilcox study, each group experienced four discussion sessions under the direction of either the teacher or a student leader. In all conditions, Wilcox posted on a chart the questions which the group was to discuss and decide on the best answer. In addition she posted explicit criteria for what makes for a good group discussion:

1. Give everyone a fair turn.
2. Give reasons for ideas.
3. Give different ideas.

She chose student leaders who were neither the most nor the least socially powerful members of their classrooms. They received an intermediate number of choices by their classmates as people who could get them to do things.

Those students selected for the trained student leader condition were given the job of helping the group to meet the three criteria for what makes for a good group discussion. During the initial training session group leaders were told the following:

> Boys and girls, we're going to see slides and hear a story about some children who have a problem--and you've been chosen to lead the discussion after we hear the story. This morning we're going to talk about and practice how to be a leader.

> There are different ways a person can be a leader Different people have different ideas about what it means to be a good leader. Some people think being a leader means telling everyone what to do practically all the time. Some people think a good leader means letting everyone do just as he pleases--not interfere with their fun. And some think--and this is my idea too--that a good leader is in between these two. I think being a good leader means being a part of a good group--talking with the other members--letting everyone tell his ideas--being just like the other members--so long as everything is going okay.
>
> But if things are not okay, then the good leader knows how to help his group. When wouldn't things be going okay? (Children may suggest, and if not, trainer mentions the silent group, the non-participator, the monopolizer.) If someone in the group never gives anyone else a chance to talk--or if one person doesn't talk--a good leader can help by asking a question--or reminding the big talker that someone else needs a chance. We'll talk about how to do this without making others angry. But remember--the good leader uses these ideas only when they're needed. Most of the time the good leader is just like everyone else in the group, listening and taking turns talking (Wilcox, p. 145).

The leaders were then shown a training film of a group discussion with a leader who talked more than necessary. This was followed by a discussion of the performance of this leader. The trainer noted any comments directed to the three suggestions on the training chart. For each suggestion the trainer actually rehearsed with the leaders how they could get the group to adhere to these suggestions. The students then role-played a discussion such as they would lead. They were directed to stop the group discussion after about five minutes and ask members to evaluate how well they were doing by the criteria on the suggestion chart.

This initial training session took 30 minutes. There were shorter follow-up training periods prior to the following sessions of each group to help the leaders with participation problems they experienced.

There are several key features to Wilcox's techniques. Note the way she laid particular stress on limiting the leadership role, so that the student leader would not become too dominant, particularly in the area of the final content of the group decision. She made sure that they would recognize such undesirable leader behavior by making a special training film. Furthermore, when she felt that special skills would be necessary for enforcing criteria for desired behavior on the group, she provided strategies and opportunities for practice for the leaders-in-training. Finally, in the follow-up sessions, she provided feedback on the problems they were experiencing.

This is not the only way to train facilitators. However, it does embody some key ideas of clarity of the role and careful preparation for new skills that are involved. Regardless of the age of the students, the instructor should always try to achieve this kind of clarity and should stop to analyze whether or not appointed facilitators will have the skills necessary to carry out the role. In the next chapter, we will include a less elaborate training program for facilitators which we used in academically heterogeneous interracial fourth, fifth and sixth grade classrooms.

Varying content of the facilitator role. If the goal of having a facilitator is to create an open exchange, then it is always a good idea to limit the role so that the facilitator will not dominate the content of the discussion. It is also essential to keep as one of the expected role behaviors for the facilitator--making sure that everyone participates and listens. Beyond that, the content of the role can vary with the task at hand. In the interests of efficiency the facilitator can gather the group together, keep them on schedule, and see to it that a final product gets turned in on time.

It is possible to break up the facilitator role into two limited leadership roles. One person might be assigned the job of moving the group through its agenda, getting everyone's opinion; another member might be assigned the role of easing interpersonal conflicts that arise and being attentive to the feelings of individual members. In a training program which divides task and socio-emotional functions of leadership roles, Schmuck and Schmuck provide some excellent components of this second leadership role:

1. Encouraging: being friendly, warm and responsive to others; accepting others and their contributions; listening, showing regard for others by giving them an opportunity or recognition.
2. Expressing group feelings: sensing feeling, mood, relationships within the group; sharing his own feelings with other members.
3. Harmonizing: attempting to reconcile disagreements; reducing tension; getting people to explore their differences.
4. Compromising: offering to comprimise his own position, ideas or status; admitting errors; disciplining himself to help maintain the group.

(Richard A. Schmuck and Patricia A. Schmuck. Group Processes in the Classroom, p. 86, 2nd edition, William C. Brown Company, Dubuque, Iowa, 1979)

As with the more task-oriented facilitator role, it is essential to train students to recognize these leadership behaviors when they occur and to develop strategies for fulfilling these leadership functions. The example from Schmuck & Schmuck is for secondary school students, but a simplified version could be developed for younger children.

Other limited leadership roles are those of secretary or recorder of the group, representative of the group to a coordinating committee for the entire classroom, or reporter for the group decisions to the class as a whole. With more mature groups who have the task of synthesizing individual productions into a written or oral report, an excellent specialized role is that of Summarizer. The Summarizer works with a chalkboard or butcher paper up in front of the group, getting down they key ideas under discussion. This is far from a mere recorder's role; the Summarizer has the job of leaving out issues he/she considers irrelevant to the task at hand and highlighting disagreements between ideas that will need to be resolved. The advantage of this role is that it tends to depersonalize disagreement. The argument is one between ideas written up on the board rather than between the individual who proposed the ideas; a good deal of objectivity is gained. Adults who are unwilling to say negative things about each other's ideas face-to-face, are enabled to be objectively critical when faced with the ideas-separate-from-the-person.

Summary. To review the major points of what I have been suggesting about leadership roles, I want to stress the major ideas the teacher should keep in mind. We have recommended a limited leadership role for groups with long-term projects. By limited is meant that the leader does not have executive decision-making rights over the group, but is restricted to tasks like seeing to it that everyone participates or seeing to it that the job gets done on time. When it comes to influencing the final decision, the limited leader plays a role like any other member of the group.

A wide variety of students should have the opportunity to play the leadership role--not just the best student or the social star of the classroom. Leadership roles may be rotated between students, over the course of the project. This will be workable if the instructor assigns the role publicily, making clear exactly what the leader is expected to do. If the leadership role involves skills and strategies that the instructor feels the students do not have, then it is essential to fashion a training program, however brief, to insure that these students will have the necessary tools for their job.

The function of the limited leader can vary. Making sure that people participate and listen to each other is a key and indispensable function if the facilitator is to prevent certain students from dominating the group. Beyond this function, however, facilitators can carry out any number of tasks as an official representative of the instructor, such as setting the agenda and keeping track of the time, or attending to the socio-emotional needs of the group members.

Finally, I have suggested that leadership can be broken up into several roles such as the Recorder, Reporter, Summarizer or Socio-Emotional Leader. Without becoming overly elaborate, giving more members some responsibility for the conduct of a group, qua group, will do much to increase commitment to the group enterprise and to make the members more conscious of how they are behaving and getting the job done.

DIVIDING THE LABOR

To the extent that different people in the group are carrying out quite different roles and jobs, there is less opportunity for conflict and sometimes very little opportunity for social interaction altogether. In the examples just given of several leadership roles operating simultaneously, people have different jobs to do, but they all revolve around a collective task such as planning and carrying out a group project. Therefore, these separate roles do not relieve people of the responsibility for interacting and making decisions as a group nor of the responsibility for behaving as a regular decision-making member of the group in addition to one's special responsibilities in the role of facilitator, recorder, summarizer, etc.

In contrast to this complex strategy of interdependence and role playing, it is possible to design group tasks where each individual goes off and does his or her part of the task. These job assignments are made by the teacher; integrating the parts of the group product may either be done on a mechanical principle or carried out by the teacher. This simple arrangement may be highly suitable for young children or for tasks where the instructor wants the group to have the satisfaction of seeing what they could produce by combining their efforts without the problems of coordination or troubled interpersonal interaction. Of course, the intellectual skills in this kind of a project are not those that come from synthesizing other people's ideas but are closer to the kinds of intellectual skills the student can practice on his own. An example of this approach would be a presentation to the class on a general topic, with each person responsible for preparing a different relevant sub-topic. The teacher could work with each individual in reviewing and preparing the student for the presentation. The student could gain skills in gathering information from various sources, pulling the information together into a coherent presentation, and making the presentation.

In between these extremes of a collective task group with specialized roles and complete division of labor, with each person contributing to the group product completely on his/her own there are various degrees of cooperation possible on a group project. The group members may work on their own but come together as a group to integrate the individual products into a final product. Or, the group may start out as a collective task group in the Planning Phase, go their separate ways in the Research Phase, and then come together once more for the Integration of the Final Product Phase. In analyzing the advantages of different degrees of cooperation, Sharan and Hertz-Lazarowitz (1980) point out that as the instructor requires the group to cooperate more closely, they have to deal with each other's ideas, take on problems of synthesis and integration, learn to readjust their perspective in light of what other people have to say, and learn the skills of critical evaluation. If you as a teacher, want your students to practice these higher order conceptual skills, then you should be planning tasks which require the group to cooperate more closely on planning and integration, even though you divide the labor among the participants. As the teacher increases the demand for collective, interdependent interaction in order to gain these teaching objectives, the interpersonal and coordination costs go up as well. As explained in previous chapters, these kinds of collective activities require special skills and training; they do not come "naturally" to either children or adults.

Further examples of division of labor. Up to this point, I have talked about breaking down various functions of the group like Secretary, Socio-Emotional Leader and Task Facilitator into different roles. I have also suggested dividing up people's activities according to the part of a group project they are responsible for carrying out.

A further possibility, used to considerable advantage in the social sciences or social studies area, is to divide up the group according to different points of view on a given issue. The task is to prepare an argument for an assigned point of view. The end project is a panel discussion or debate in front of the class.

One last example is useful for a collective task group that is going to have to work together closely. One can break up the task so that each person plays a different and complementary role; a technical work team such as an airplane crew or an operating room team operates in this way. People work together very closely, but each has a different job to do. This pattern was used with great success for an interracial summer school project where the students were divided into interracial groups for the purpose of making movies; a highly interdependent task (Cohen, Katz & Lohman). The roles were divided into Camera Person, Director, Story Writer, Actor, etc. Over the course of learning to make the movie, each student got the chance to play each role. (Much to the surprise of the staff, the children thought that the most important role was that of Camera Person, and not that of the Director.) This pattern has the advantage of cutting down on possible conflict; it also teaches the participants to take the perspective of the other. For the interracial situation it has the prime advantage of teaching the students that different people can make very different and creative contributions to the group, if given the chance to play a specialized role.

THE GROUP INVESTIGATIVE METHOD

In the final section of this chapter I would like to describe in some detail the Group Investigative Method developed by Shlomo Sharan and his colleagues for use in the schools of Israel. For a complete description, the reader should see the chapter in Contributions to the Study of Cooperation Education (Sharan, Hare, Webb and Lazarowitz, Eds., 1980), entitled "A Group Investigation Method of Cooperative Learning in the Classroom."

For the purposes of this chapter I want to highlight the way in which this technique uses both division of labor and a variety of leadership roles. This technique is recommended for teachers who want to develop higher order cognitive processes such as critical evaluation, adjusting to other people's intellectual perspective, synthesis, and analysis. Another objective is to provide students with the experience of making decisions about future activities and carrying through in an adult and responsible manner. In order to accomplish these objectives, Sharan et al. have recommended highly interdependent project groups which continue functioning over time in order to accomplish long-term projects which are presented to the class as a whole. There is a considerable emphasis placed on the initial selection of topics and formation of work groups, so as to maximize each student's sense of control and commitment to the situation.

In order to solve the problems of interpersonal process which are bound to arise in such groups, the technique utilizes varied leadership roles and some training in group process skills. Teachers who use this technique receive extensive in-service training as a team from a selected school. There is considerable attention paid to choosing projects which involve a wide range of intellectual skills and allow alternative answers, solutions and approaches as well as a variety of final products as an alternative to oral or written reports.

This method of teaching assumes that knowledge does not develop from a single input and storage process. It stresses the ability of a group to produce "meaning" as a result of collective effort. Social interaction and communication play a vital role in the pupil's construction of knowledge.

A class engaged in group investigation is structured into a set of small groups, each numbering from two to approximately six students. The groups engage in a collective effort to study a given topic for a specified period of time. Both size and time limits of the group are variable. Usually, groups study different aspects of the same general topic. Each group plans specific content and methods of study, carries out its study plan and prepares and presents it to the entire class in some form. Problems selected are those to which there can be a variety of solutions and perspectives. The intellectual skills required are those of reading comprehension, summarizing, efficient use of reference books as well as evaluation, analysis in discussion, and integration of one's ideas and information with the work of others.

In the initial stage, there is an elaborate process for identification and selection of group study topics through cooperative planning by all students. Special groups are created, just for the purpose of developing lists and ideas of aspects of the topic which might be studied. The teacher plays an active role in helping synthesize these ideas into a final list of topics which will incorporate the suggestions from a large number of people. Then students are allowed to select which topic and group they will work with, so that the initial planning groups and the project groups are not one and the same. This allows for students to develop an initial commitment to a group out of their own interest in the topic and their own free choice of that group.

The groups then must plan the learning task, determining sub-topics for each member and how they will work together. The teacher assists groups at this stage to choose learning tasks which are not limited to gathering information but involve active investigation. For example, a learning task might be to go out and interview some people with respect to a question related to the topic rather than to go copy out some information from the encyclopedia. A variety of sources should be used for the intellectual activities which offer a variety of ideas, opinions, evaluations, etc. The group must also look ahead to the kind of group product they want to produce. This forces them to coordinate their tasks to an intellectual goal.

The longest stage is the one in which the investigation is carried out. Although this involves considerable division of labor, there may be constant need to inform and coordinate and confer between students and between students and the teacher. During this process the teacher may have to stress group skills and individual study skills.

The final stage involves preparing the final product. This technique is unusual in its attention to the problem of reintegrating the intellectual projects into a presentation for the class as a whole. Sharan et al. recommend a classroom coordinating committee with a representative from each project group. The function of this committee is to keep track of the progress of individual groups and plan ahead as to how each product can be combined into an overall coherent series of experiences for the class. The authors provide examples of final reports in a sixth grade project on ancient Greece; they include a quiz show about Olympic gods, a large model of the Parthenon, accompanied by slides, pictures and a floor plan; a series of Olympic games; and a dictionary of Greek words used in Hebrew.

In addition to a presentation to the class as a whole of each group's project, the group investigation technique recommends several other strategies for tying together the curriculum unit. Learning centers can be developed where students can be required to study materials that the instructor wants everybody to master as background. Lastly, the class may be asked to study carefully each other's projects in preparation for an examination which is made up of questions submitted by each group on their materials.

Throughout this lengthy process, groups are managed by having different members play chairperson. The chair my be asked to present a topic, keep track of time, distribute written material, summarize previous discussion, focus discussion on a topic, or encourage maximum participation. There are also roles like Recorder, and Representative to the Coordinating Committee which may be played by various members of the group.

In a three week experiment with 217 pupils from 10 classrooms in Grades 2-6, Sharan, Ackerman & Hertz-Lazarowitz (1980) evaluated the type of learning taking place in five classrooms using the small group method and the other five using traditional methods to teach the same materials. The experimental teachers had attended a series of 18 workshops over the course of one and one-half years. All the students were from lower socio-economic groups. With the identical sets of material, teachers in traditional classrooms presented topics verbally, asked questions and gave homework tasks. The evaluation test used items of lower and higher cognitive levels, using Bloom's taxonomy. In three out of five grades, the small group treatment classrooms did significantly better on higher level questions. The direction was as predicted in the other grades, but did not gain statistical significance. On the lower level questions, the two groups did about the same (Sharan, Hertz-Lazarowitz & Ackerman, 1980)

The goals of the group investigation method are very ambitious from an intellectual point of view. The students play the role of creative and active "research scholars." In order to achieve these goals a high level of interdependence is necessary. The problems created by that interdependence are solved in various ways: building commitment to the group and its project; use of division of labor; group process skills. The developers admit that not every student can be integrated into such a demanding group. They suggest that there are some students who are not suitable for such collective tasks who might well be allowed to work on their own. Other students may be allowed to shift groups if serious problems of commitment develop. The teacher must work as an intellectual leader and resource person, assisting the groups to develop the more challenging questions and learning tasks, helping the groups with the resources and skills they will need to carry out their tasks, worrying about coordination of the different project groups, and paying close attention to what will be the overall intellectual integration of the curriculum unit. At the same time the teacher must be skillfull in assisting groups to overcome their problems, without intervening and telling them directly what decisions they must make or telling individuals how they should handle interpersonal difficulties in the group.

I have dwelled at considerable length on this example to show that all of this can be accomplished with admirable intellectual results, even with children as young as second graders and with students who do not come from upper status homes. Not all groupwork tasks need have such high order intellectual objectives and not all groupwork tasks require such interdependence; not all groupwork need place such a heavy emphasis on reading skills. Nevertheless, this example is a stimulating one, suggesting what an elaborate and skilled application of groupwork methods may produce.

Chapter VIII

Groupwork in the Desegregated Setting

The use of small cooperative groups is often recommended for interracial classrooms. The rationale for this recommendation is that small group settings will provide interracial "equal status" conditions which have long been thought to reduce prejudice and racial stereotyping (Allport, 1954). In addition, cooperative groups, as we have mentioned before, have been found to promote increased friendliness and positive affect. For educators who are concerned with the integrated schooling experience as a means to promoting interracial harmony and general social integration of the races, cooperative groupwork would seem the ideal tool for these social goals.

Effects of Groupwork: Achievement and Race Relations

There are several cooperative groupwork treatments for the interracial classroom which have been the subject of systematic research. It is important to analyze for each one, the nature of the task and evaluation structure, as well as effects on students. For example, one cooperative treatment, Aaronson's "Jigsaw Classroom" has each member of the group responsible for teaching certain materials to the rest of the group. The group then is tested on the sum of the materials as individuals, butthe group receives a single total score reflecting individual members' performance. Thus, students are motivated to work closely with each other, not only because they are responsible for teaching materials, but because their final score is dependent on the grasp each member has of the materials to be learned (Aaronson, Stephan, Sikes, Blaney & Snapp, 1978).

After two weeks using this method, in fifth and sixth grade integrated classrooms, learning outcomes were compared to those of students in classrooms taught by traditional methods (whole class). Results showed a significant gain for minority children in the Jigsaw Classrooms in comparison to minority children in the traditional classroom. There were no differences in test scores for the majority children (Lucker, Rosenfield, Sikes & Aaronson, 1976). In another study of Jigsaw Classrooms, Blaney found after a six week experiment, pre to post-test gains on liking for one's group in the Jigsaw Classroom where students had been working in interracial groups. A questionnaire measure showed increased self-esteem in the Jigsaw Classrooms and declines in the conventionally taught control classrooms. However, Black pupils in both experimental and control classrooms declined in their liking for school; and Mexican-American children in the control classrooms showed a greater liking for school than those in the Jigsaw Classrooms (Blaney, et al., 1977).

In another popular treatment for integrated settings, referred to as STAD, Slavin uses interracial groups who receive a group score on a quiz after work with highly focussed teaching materials. The score each student earns for his or her team depends on how well that student does in comparison to other students in his or her own ability-achievement group in the classroom. Thus, a team is not penalized for having a low-achieving student as one of its members unless that student does poorly on the quiz in comparison with other low-achieving students in the class. They may help each other in studying, but it is not typically mandated. Effects of STAD have been assessed with curriculum-specific tests and with standardized achievement tests. As a control group Slavin has used classes working with the same highly structured learning materials, but with conventional instructional rewards. This is a particularly demanding kind of control group; and the results of the three studies with interracial classrooms were quite mixed. Sometimes the test outcomes were significantly superior for STAD classrooms and sometimes they were not. In all three of the studies on mixed-race classrooms, there was in increase in cross-racial friendship choices as a result of STAD (Slavin, 1980; Slavin, 1977; Slaving, 1979, Slavin and Oickle, 1980).

Both these approaches make the students depend on one another for receiving a favorable evaluation for their work. There are available many laboratory and classroom studies of the effect of a group reward structure on achievement. Johnson, Maruyama et al. conducted a "meta-analysis" on 27 studies of the effects of competition, cooperation, and individual rewards on achievement and productivity. This is a statistical procedure in which the authors ask the question: How powerful is cooperation as compared to competition or individual reward in accounting for the results of all these studies, taken as a whole? In this analysis cooperation refers only to a group of people having a joint goal, so that to the extent one person succeeds or fails, everyone succeeds or fails. Some of these studies took place in the laboratory and some were in the classroom. Overall, their analysis found cooperation superior to competition in promoting achievement and productivity. Cooperation was also superior to individualistic efforts. Some experiments and classrooms tend to combine cooperation with intergroup competition, but this analysis suggested that cooperative groupwork without intergroup competition is superior in producing achievement. Very suggestive is their further finding that the superiority of cooperation is enhanced when the task is not a rote learning or decoding task and when people teach each other and work together accomplishing the group goal (Psychology Bulletin, in press).

Desegregated classroom teachers experience tremendous pressure for achievement for their students. Minority parents are so hopeful of an improvement in achievement in the desegregated setting. The teachers themselves want very badly to move low achieving students up to grade level as soon as possible. Parents of the middle class white students often fear that their children will somehow be held back because of desegregation; they envision that the academic level of the class will deteriorate and that their children will suffer by having the teacher pay more attention to the low-achieving minority student.

When, in the face of such pressures for achievement, the teacher decides on groupwork as a viable alternative for this academically heterogeneous setting, s/he will probably face (or fear that such questions will be raised) the issue of whether the use of such techniques will detract from academic achievement. Many people view the use of groupwork solely as a technique for making students' behavior more "prosocial." Learning how to get along with others is not seen as a top priority goal by parents who are primarily concerned about success and status on an individual basis.

The teacher may reassure anyone who inquires that the research evidence on the use of groups with interdependent goals, is favorable. At least, there is absolutely no evidence that achievement of higher status students is depressed and there is evidence that under some conditions the achievement of minority students is boosted. Furthermore, the Johnson and Maruyama review of many studies shows the superiority of this method, in general, to that of traditional individualistic learning approaches.

In review of all the available studies, Sharan summarizes reported effects on interracial relations in relation to the differences in the nature of groupwork (Sharan, 1980).

> Most of the research studies which assessed race relations in the desegregated classroom as a function of interaction and peer helping in teams reported positive effects. In most cases, gains in cross-racial relations were modest. Nevertheless, it seems clear that team learning, in its various manifestations promotes positive interethnic contact under cooperative conditions. Despite this positive overall evaluation, some studies proved more effective than others, and, more important, many critical questions remain to be answered. (P. 258).

Again, we have no negative effects on interracial relations of cooperative groupwork, but fail to find consistently positive results. Although the teacher can certainly conclude that she/he has everything to gain and little to lose from using such techniques in the desegregated classroom, it is clear that desired results do not automatically follow from setting up group tasks and group goals for interracial classrooms. What is needed is a more powerful and penetrating way to analyze the dynamics of interracial groups working under cooperative conditions.

Analyzing the Status Problem

Much of what has been discussed in earlier chapters is relevant to the question of groupwork in interracial classrooms. Nowhere does the issue of status become so critical as in this particular setting; and nowhere does the use of the concepts I have been describing become more valuable than in thinking out this particular technical and social problem.

The core of the analysis is clear; the cooperative interracial groups that are widely recommended for desegregated settings make a lot of sense from one point of view: they are obviously far superior to a social setting which provides no time or place for students of different backgrounds to learn how to work together or even to become acquainted with one another. Integration does not take place automatically on the playground; we now have many studies of desegregated schools documenting the phenomenon of voluntary resegregation by the children in the play yard, lunchroom, and classrooms (Schofield & Sagar, 1977), 1979). Some desegregated schools use various forms of tracking and ability grouping, so that classrooms provide no place for interracial interaction. When researchers find improved interracial relations in classrooms with cooperative groups, it is often in contrast to control classrooms using rigid ability grouping which provide almost no opportunity for children of different races to talk with each other.

Clearly, the cooperative small group is far superior to any of the above arrangements for fostering social integration. On the other hand the cooperative group working on a collective task is also a setting for "self-fulfilling" prophecies based on differences in social and academic status. If the net result of groupwork is the greater activity and influence of the Whites within the group in comparison to the Blacks or Browns, then the desegregated situation is only a mirror for the status order in the outside society. This is not what educators or policy makers have in mind when they talk about social integration. This is indeed a classic "dilemma of groupwork."

Social class. Resolving this dilemma requires an initial analysis of the status characteristics involved in the classroom. In many desegregated situations, the minority ethnic students come from homes of a far lower socioeconomic status than the Whites. This status difference has critical relevance for the schoolroom, because lower social class children do less well on conventional academic curricula. A strong social class difference among students in a classroom produces great academic heterogeneity, as any experienced teacher knows. And unless some fairly radical steps are taken to interfere with the process, the teacher will find that a status order based on Reading Ability, rapidly develops and depresses the participation of low status students.

Race. Add to this problem, the operation of race as a status characteristic in collective tasks. If social class results in a strong academic status order, and if the students with lower academic status tend to be Black or Brown, then the operation of reading status will only reinforce the operation of racial status. If White students learn from the groupwork that minority students are less active and influential, they will come away with every racist expectation for minority intellectual incompetence reinforced. This is hardly what teachers have in mind when they decide to use cooperative interracial groups.

In addition to the problem of reinforcing stereotypes, if there is a strong status effect operating in the classroom, the minority students who are poorer in reading will see themselves as generally incompetent at school tasks. This will depress their effort, their engagement, and their participation. Thus the teacher will face the common problem of the student who needs desperately to put out extra effort to catch up on basic skills but who appears unwilling to try. In the educational literature this is often referred to as a problem of poor self-concept. Coming at the problem from status theory, we can see it is not so much a characteristic of the personality of the minority child but a function of the classroom situation. The student is only reflecting the general evaluations and expectations for competence he/she is receiving from the teacher and from classmates.

If in contrast, the desegregated classroom contains children from differing racial or ethnic backgrounds but with similar social class and achievement characteristics, then we do not seem to find severe problems based on racial status and there are more positive intergroup relations. Exposure to minorities who achieve as well or better than majority children, may well constitute the "equal status" classroom conditions which have long been seen to reduce prejudice and stereotyping.

Analysis of Interracial Groupwork

Now that we have conceptualized some of the peculiar status problems of a desegregated classroom with a wide social class range, we can return to the initial examples of groupwork in the interracial setting. In the case of the Jigsaw Classroom, when the student who has low academic status (and is probably Black or Brown) functions in the role of teacher of his/her assigned portion of the lesson, there is potential for an effective treatment of expectations for competence. However, the task is a conventional curriculum task involving reading and comprehension of materials. Unless this student is extraordinarily carefully prepared for the teaching role, there is a high probability that he/she will not appear unusually competent when acting as teacher. In addition, it is all too easy for the better readers in the group to "take over" from the faltering "teacher" and read and teach the materials to the group. Our experience with training students with a history of poor achievement for the role of teacher has been that it is best done under highly controlled tutorial conditions; it takes great patience and varying amounts of time for different students. Even when the low status student is actually performing competently, it takes further extraordinary steps to convince him or her of that competence. These conditions are unlikely to be met consistently in Jigsaw Classrooms.

If this is the case, then why does the Jigsaw Classroom produce improved achievement for minority students under some conditions? The answer to this question lies in the irony that it is not necessary to change competence expectations to produce some improvement in learning. When there is no groupwork many low status students withdraw from their assignments and put out very little effort. The Jigsaw Classroom is a compelling group situation, in which it is in the interests of the group for poor achievers to do well on the exam. The group cannot "afford" a poor performance from the low achievers. They will read the materials and explain them if necessary. Thus, the poor student is much more likely to become engaged and is not allowed to fail just because of a reading deficiency. Groupwork can produce increased engagement of the low achiever, especially if there are some urgent reasons why peers should assist such students. Furthermore, if the group process is based on norms of cooperative interpersonal behavior, there should be positive results in interpersonal relationships among students of different races. In the case of the Jigsaw Classroom, there is considerable stress on good group process, so that the results achieved by this technique in improved interracial relations are understandable as a product of this training.

From the point of view of status problems, the Jigsaw Classroom is probably not a sufficiently powerful technique to alter general low expectations for competence on the part of students with Low Reading Status (who are more likely to be of minority racial or ethnic background). Thus, students may like helping the low status student and may have positive feelings about him/her as a person, but this does nothing to change perceptions that minority students have less to offer to the group than majority students and stand in a subordinate and child-like relationship to the majority student. Furthermore, the unresolved problem of low expectations for competence may account for the inconsistency of positive effects on tested learning outcomes of this method.

There is a similiar limitation in the STAD technique. In this case, care is taken not to penalize the group for the lower performance of the low achiever, by having his/her score given, relative to a similar group of other low achievers in the classroom. This no doubt prevents the group from behaving in a punitive manner toward the low achiever, but at the cost of the strong reinforcement of the ability status of every member of the group. As a matter of fact, in this technique, one's achievement status is officially sanctioned by the teacher, because one's official evaluation is based partly on one's ability status. From the point of view of Expectation States theory, there is little hope of changing expectations for competence based on reading or ability status under such conditions.

As in the Jigsaw Classroom, there is good reason to help the low achieving members of the group to perform. Furthermore, the use of highly focussed, structured learning materials makes it comparatively easy for peers to act as effective teachers. This helping behavior, in turn, fosters interracial contact with a positive effect.

Note, however, that the student with higher social and academic status in the role of "benefactor" of the student with lower social and academic status who is seen as "needing help." Minority students play a powerless role as group members who need to be helped. Even though interracial liking can be increased under these conditions, certainly, general expectations for incompetence and powerlessness of many minority students have been reinforced. Essentially, the teacher has settled for a classroom social structure which mirrors the power and status arrangements of the racial groups in the outside society.

I would argue that this technique does not produce equal status conditions. Moreover, the increased engagement and participation of students with low academic status will not reliably lead to measurable learning gains. The learning gains of minority children will not occur consistently in this social structure.

What are the critical conditions in the desegregated classroom for accomplishing the twin goals of improved achievement and positive interracial relations? Below I have listed some questions to ask of any proposed groupwork treatment for the academically heterogeneous desegregated setting:

1. Is there a specific collective task delegated to student groups?
2. Are the groups mixed as to race and reading ability?
3. Do group members have to depend on each other for achieving a favorable evaluation of the group product?
4. Have the group members learned some special norms concerning how to behave cooperatively in groups?

If the answer to these first four questions is "Yes," then one should see significant improvement in interracial relations over the situation where the answer to these questions is "No." If all these conditions are met, will there be improved achievement for low achieving minority students? Although there should be improved participation and engagement in the task and although such students will receive assistance from more successful classmates, there are two more "conditions" which must be met before achievement results will be consistently produced. It is necessary to ask two more questions:

5. Is the nature of the task very similar to conventional classroom work? And is reading or writing a prerequisite for each individual to function successfully on the task?

6. Have special steps been taken to modify low expectations for competence by low students with low academic status?

If the task is highly conventional and/or requires reading and writing as prerequisite to individual success, then there are forces working against each other in affecting the achievement of students with lower academic status. The task is collective--students need each other to achieve a favorable evaluation--and cooperative norms are operating; these forces are working for you, boosting the participation and effort of the low status student. But the conventional nature of the task itself is working against you--your tasks require only skills on which low status students have repeatedly received low evaluation. Therefore, they are expected to do very poorly relative to their classmates (by themselves as well as by the others). Under these conditions I would not expect to find (nor do the studies find) reliable achievement gains.

To obtain consistent results, one has to do something about these low expectations for academic competence which are operating in the groupwork task. This is entirely possible with a careful selection of task and some special steps to modify expectations for incompetence. These steps might include multi-ability treatments and/or the allocation of special roles to low status students.

Combining cooperative groupwork for which the students are properly prepared with a treatment for expectations opens the way for positive social relations in the interracial setting and improved achievement for minority students with low academic status. The following chapter provides the specific steps a teacher might take to achieve these goals.

Chapter IX

A Design for Groupwork in the Integrated Classroom

My criticism of available designs for groupwork has been rather severe. When there are large achievement differences correlated with racial or ethnic differences, the goal of "equal status conditions" is a difficult one to achieve in the desegregated school. The teacher might well ask: Is it technically possible to achieve the goals of superior learning on the group task for students who are low status in the classroom and an opportunity for the equal status interaction which reduces racist and ethnic stereotypes?

In this chapter I will try to show how, using basic principles introduced earlier in this book, it is entirely possible to design groupwork which meets these social and academic goals. I need only outline the steps here because they have already been discussed in previous chapters. The steps are a combination of strategies with known effects on the status problem. It makes sense to combine into a package various strategies which have been successful in classroom research and which have a strong theoretical base. We are, after all, attempting to achieve equal status conditions in a most challenging setting.

There is one limitation of this strategy which the practitioner must keep in mind. Even though groupwork can produce superior achievement on the groupwork task itself, the improved expectations for competence on the part of low status students cannot be expected to transfer to conventional subject area instruction. If you want to modify competence expectations so that they affect a broad range of classroom tasks, then you must attack the underlying features of classroom instruction which produce generalized expectations for incompetence on the part of certain students.

The steps below are a good first stage for the teacher who wants to try out the techniques of treating status problems, but is not yet convinced or sufficiently confident to make more radical changes in the classroom.

Step 1 Selection of Tasks for a Series of Groupwork Experiences

Pick interesting and intellectually challenging tasks. Pick tasks which are related to your curriculum objectives. These tasks should be much more like the way adults in the work world use their minds, than the way students ordinarily operate in classrooms.

Pick tasks in which you can see that there are multiple abilities involved.

Definition: A multi-ability task is a groupwork assignment which does not make reading, writing, or computation a prerequisite for successful participation. Participants understand that no one person can be good at all these abilities and that everyone will be good on at least one. Such tasks may involve group discussion, interviewing, role playing, manipulation, observation, reasoning--in other words a variety of skills and media.

Examples: Science--experiments, naturalistic observation, nature projects, learning principles of science through active problem-solving; many available science curricula provide rich materials which can be adjusted so that students can assist each other with reading and writing skills.

Language Arts--understanding and interpretation of literature can be assisted by role playing and imaginative discussion of motivation, of characters, and of underlying meaning of poems, stories and drama.

Social Studies--simulations, oral history projects, community resource surveys, discussion of social issues, dramatic role play of customs and life style of historical and contemporary societies; learning the difference between observation and inference in social science; interview studies of how local government works.

Foreign Language--groups of students can plan and act out conversational scenes, such as meeting on the street or ordering food in a restaurant.

Visual Arts--movie or videotape making with each group responsible for a short movie or tape.

Step 2 Preparing Student for Cooperative Group Behavior

Analysis of your Tasks: What group skills will students need for your tasks? Will discussion and decision-making be involved? If so, students will need practice in listening skills, in conciseness, and in being attentive and responsive to other people's ideas.

In addition, you will want to introduce norms for equal participation. There may be other relevant group process skills which you want to teach before the groupwork begins or which you may want to teach when the problems arise.

Orientation of Students: Students will need to know about the groupwork tasks they are preparing for. They will need to understand why it is important to learn skills for working in groups with people who are not close friends. Stress the importance of such skills in adult life. Avoid lecturing; use visual aids such as Epstein's Four Stage-Rocket (see chapter VI).

Tasks for Learning Skills and Norms: Select an engaging discussion task which is non-academic. A moral dilemma such as the Fallout Shelter Task or a survival problem such as Lost-on-the Moon is good..

Composition of Groups: Plan group composition ahead of time. Don't plan groups on the basis of friendship.

Compose groups heterogeneously on ethnicity, sex, and academic standing. Put on the board the composition of the groups and where they are to meet. Change groups for each new day of practice.

Practicing New Behaviors: Use visual aids to make sure that students know what new behavior like "listening" they are practicing. Use techniques like Epstein's which force each person to "listen" or "reflect" on what the person before has said. You may want an initial brief uncontrolled discussion where group becomes analytical and critical of the problems they experience. (See chapter VI for details.)

Use of Observer Role: One member of each group functions as an observer. He/she records key behaviors when they occur on observation sheet. Observers then report on behalf of their group how many times they saw the desired behaviors. Have an assistant take aside observers for training.

Step 3. Preparing Students for Multi-Ability Groupwork

Discussing Multiple Abilities: Briefly describe the nature of the groupwork tasks. Stress the similarities of what they will be doing to the way adults use their minds rather than similarity to their previous school experience.

Tell the students that there are multiple abilities involved. Give examples of the specific abilities you see are involved. Ask the class for further suggestions as to other abilities in these tasks.

Explain that no one person will be good at all the abilities.

Explain that everyone will be good at one.

Explain that it is legitimate to ask classmates for assistance if materials are difficult to read or if one is having problems with writing something up. (These are only two of the relevant skills and abilities.) Explain that it is a group member's duty to assist others who need help.

Preparation of the Task: Have all materials carefully prepared in advance. Go over written instructions with class as a whole. Make clear how group products will be evaluated. Figure out how much time introduction will take, so that you will not find that by the time you are ready to start the groupwork, the class period is over.

If students are to play specialized roles, be sure they receive a special training session. Be sure everyone understands what each of these official roles is expected to do.

Composition of Groups: Always plan ahead of time. Always make them heterogeneous as to ethnicity, sex and academic status. Group membership may remain constant for length of a single groupwork project.

Step 4. Use a Group Facilitator

Appoint a Facilitator for each Group: Select students who are usually quiet and may be low achievers or have little social influence. Select students who are low achievers or who may be seen as "active troublemakers" in your class. Be sure that these students get a turn to play the facilitator role. The role may be rotated so that other students also have this opportunity. Make a public statement that you are appointing Joe Jones as Facilitator of Group A. Be sure to provide leadership opportunities for female students as well as male students.

Facilitator's Role: You can have the role include a number of tasks useful to you in getting the parts of the job done on time and the groups coordinated with the materials and outside sources.

Role should always include the following when group discussion and decision-making are involved:

See to it that everyone participates.
Keep the group moving forward on the task to meet time deadlines.
Make sure that people are listening to each other.
Make sure that people give reasons for their ideas (especially important for younger students).

Making Role Explicit: Everyone should know what you expect of the facilitator. List role expectations like those above on a chart.

Facilitator Training: Facilitators may need help in understanding that their role is not to make decisions for the group. They may also need suggestions as to tactful ways to get people to participate, listen to each other, and to prevent some from talking too much.

Step 5. Let the Groups do Their Work

Delegation of Authority: You have, in effect, delegated authority to these groups of students to carry out the task, using your instructions. Their decisions are their own to make. They can even make mistakes on their own. They are accountable for the group product. Their special roles and the norms for behavior will do much to control behavior instead of your direct supervision.

You must let go and allow the groups to work things through without your telling them what to do at every step of the way. They must learn to solve some problems for themselves.

Problem of Control and Coordination: Remember that the new norms and the special roles like the facilitator will do much to control behavior and make it effective and pro-social. Remind groups of norms and refresh facilitators on their roles. Ask groups to critique their own group process in light of the norms and roles they have learned.

If task is long-term and has complicated stages, design some check points, where you can comment on group plans. You may want to go over plans group has made with a representative of the group. Try not to second-guess their decisions. Make suggestions as to how they can extend their plans if they are not sufficiently challenging. Make suggestions of special resources they may want to use. Ask questions rather than direct behavior.

If the class is to coordinate their separate group activities, have a representative of each group meet in a special coordination "task force."

If some individuals are very unhappy with their group and groups seem unable to improve the situation, you may have to intervene and come to the "rescue" of an unhappy student. Membership may be shifted; or in extreme cases of an individual who is simply unable to function in this setting, he/she can be given a specialized individual role which bears some relation to the class activities.

Step 6 Wrap-up

Bring class back together after tasks are completed for performance or report by individual group.

Be sure to include in a final discussion some consideration of how well groups operated and how different individuals made different contributions because of the milti-ability character of the task.

Step 7 Evaluation

Evaluation of Students: There should be some way to evaluate the group product. Other students in the class can learn how to be constructive critics of the product of each group. You can evaluate the group product. The group can evaluate its own product if they have clear criteria.

Never attempt to evaluate the contribution of the individual to the group. You may want, at a later time, to design a test or quiz involving the substance of the material learned in the process of groupwork. Each group may want to contribute items to the test to see if classmates have learned from their group presentation or product.

Student groups should be able to evaluate their own group process and the success of the facilator role.

Evaluation of Your "Engineering"

You will want to be critical of your groupwork the first time you run it through. Did the students find the task engaging and interesting? Did they learn something from the experience? How effective were your instructions in producing clarity about what to do. Were there management and coordination problems?

Beyond these technical problems is the issue of whether or not the tasks were successful in producing equal status behavior. Were the low status students active in their groups? Was the student who played the facilitator role seen as competent by peers and by him/herself? There are some effective and simple ways to evaluate your own classroom. These tools have been developed in classrooms and do not require special training in data collection or analysis. In the sections below, I will describe what they are and how to use them. Included in these materials are sample observations guides, a questionnaire, and an interaction scoring sheet. Depending on what aspects concern you the most, they can be used separately or together.

Guide for an Outside Observer

It is extremely valuable to have an outside observer visit the classroom on the day you first start academic groupwork tasks. You will find it difficult to be self-critical when you are busy orienting students and directing the groupwork. Perhaps the ideal situation is to have another teacher present; you could return the favor and be the outside observer in his/her classroom.

The outside observer can take notes on the clarity of your instructions and whether or not the orientation held the attention of students and was sufficiently complete and clear to prevent confusion as they proceed with their tasks. The observer can help with a critique of the effectiveness of the multi-ability definition of the task and the discussion of how all the group process skills and cooperative norms should be put into operation in the academic task. Finally, an outside observer can be asked to listen to you assigning the facilitator role--the clarity with which you delegate the role to a particular set of students.

When the students start to work in their groups, the observer can move around the room watching and listening to the students. Are the students helping each other? Is the facilitator dominating the group? If you point out to the observer the students you are most concerned about, she/he can keep a special watch on their behavior: Are they participating? Do they seem to understand what is going on? The observer can check on whether you are accidentally dominating certain groups, not allowing them to solve their own problems rather than stimulating them to extend their thinking.

Figure I presents a sample guide for an outside observer. Using these guidelines the observer can take notes. A conference with the observer and his or her notes will prove invaluable in deciding what needs to be changed for the next session or for the next time you introduce this groupwork task.

Figure I

Sample Guide for Observing Teacher

A.

Your observer should be present in good time to take notes on your orientation and instruction as you prepare students for their first academic groupwork.

1. How clear are the instructions?
2. Does the instructor make use of visual aids and student participation rather than lecturing?
3. How attentive are the students to the orientation?
4. Does the instructor make explicit the multiple abilities involved in the task? Does he/she make clear that reading and writing are only some of the abilities involved in the task?
5. Does the instructor make clear that people have the right to ask group members for help--and that group members have the duty to assist others?
6. Is the assignment of the facilitator role clear? Who are the facilitators? What are they expected to do?

Figure I (continued)

Sample Guide for Observing Teacher

B.

Point out to the observer the students about whom you are especially concerned. These should be minority students with poor academic skills. Especially important are such students who are also not very popular or powerful in informal social relations in the classroom. In addition, you should be concerned with other students who are low in academic standing and/or unusually quiet and socially isolated. The observer should spend some time answering these questions for each group.

1. Do some of the weaker students show a grasp of the problem? Are they participating? Is anyone listening to them?
2. Do you see any evidence of a status struggle in the groups?
3. Is the teacher dominating the small groups?
4. Did negative outcomes for the group appear to discourage them?
5. Are students giving evidence of really working through problems for themselves?
6. Are students helping each other?
7. Is the facilitator dominating the group?
8. Are the students confused about what they are supposed to do?
9. Is any one student dominating the group?

Use of a Student Questionnaire

If the students are fourth graders or older, many important questions can be answered with a questionnaire. If all the children do not read well, you can read the items out loud. In Figure II, I have presented a sample student questionnaire. These are questions which have been very successful with children as young as nine years. These particular items allow you to examine the success of the low status students. By asking students to put down their names on the questionnaire, you can pick out the students of special interest and see whether they reported participating and how they felt about playing the facilitator role. Furthermore, you can check on the responses of the group members to see if they thought the facilitator role was adequately played. You can actually see if any low status students were picked as having the best ideas or were chosen as having done the most or least talking in the group. We have always found that there is a good relationship between people's report of such matters and the systematic scoring of an observer.

If the multi-ability definition of the task has been effective, then students should be able to list an ability on which they thought they did well. Also, they should be able to list some of the abilities you introduced as well as other abilities outside of reading and writing.

Even the success of the training in cooperative norms can be checked out with a student questionnaire. Do they report experiencing problems with not being listened to, or talking much less than they wanted to? Did people have trouble getting along in the group? Would they be willing to work with this group again? The sample questionnaire contains only some of the questions you mightfind useful. You should pick and choose according to your major concerns. You can make up additional questions.

Figure II

Groups

Sample Student Questionnaire

Name: ____

Please check with a ✓ on the line at the left of each answer that you think represents your thought or feelings for each question. Remember, there are no right answers. I want to know what you think.

Section A

1. How interesting did you find your work in the group?

_____ a) Interesting

_____ b) Fairly interesting

_____ c) Not very interesting

_____ d) I was not interested at all

2. How difficult did you find your work in the group?

_____ a) Extremely difficult

_____ b) Sometimes difficult

_____ c) Not too difficult--just about right

_____ d) Very easy

3. Did you understand exactly what the group was supposed to do?

_____ a) I knew just what to do

_____ b) At first I didn't understand

_____ c) It was never clear to me

4. What abilities did you think were important for doing a good job on this task?

5. Was there one ability on which you thought you did very well?

_____ Yes _____ No

6. How many times did you have the chance to talk during the group sessions today?

_____ None

_____ One or two times

_____ Three to four times

_____ Five or more times

Sample Student Questionnaire

7. If you talked less than you wanted to, what were the main reasons?

_____ I felt afraid to give my opinion
_____ Somebody else interrupted me
_____ I was not given the chance to give my opinion
_____ I talked as much as I wanted to
_____ Nobody paid atention to what I said
_____ I was not interested in the problem
_____ I was not feeling well today

8. Did you get along with everybody in your group?

_____ With few of them
_____ With half of them
_____ With most of them
_____ With all of them
_____ With none of them

9. Did everybody listen to each other's ideas?

_____ Only a few of them
_____ Half of them
_____ Most of them
_____ All of them, except one
_____ All of them

Section B

1. Who did the most talking in your group today?

2. Who did the least talking in your group today?

3. Who had the best ideas in your group today?

4. Who did most to direct the discussion?

5. Would you like to work with this group again?

_____ Yes _____ No

If not, why not?

6. How well do you think the facilitator did today in his/her job?

Analysis Guide for the Questionnaire

I. What proportion of the class found the task uninteresting, too difficult or confusing?

   A. How many students reported that the work was interesting or uninteresing? (SECTION A, Q#1)

   B. How many students reported that the work was extremely difficult or very easy (SECTION A, Q#2)

   C. How many students reported that the instructions were never clear to them? (SECTION A, Q#3)

II. Did the students see the task as involving multiple abilities?

   A. How many students were able to list more than one ability? (SECTION A, Q#4)

   B. How many students were able to list one ability on which they thought they did well? (SECTION A, Q#5)

   C. How many of the abilities listed were like those in ordinary schoolwork? (SECTION A, Q#5)

III. How was the group process? Are there special problems that need further work?

   A. What kinds of problems are checked off frequently on SECTION A, Q#7?

   B. How many students report getting along with only half those in their group or none? (SECTION A, Q#8)

   C. How many students report that half of the members of their group or fewer listened? (SECTION A, Q#9)

   D. Of those students who said they would not like to work with their group again, what kinds of reasons did they give? (SECTION B, Q#5)

IV. How did the low-status students feel about their experience? (Pull out these questionnaires and make these tabulations:)

   A. What proportion of these students found the task uninteresting, too difficult or confusing? Is this percent higher than that for the class as a whole?

   B. What proportion of these students listed an ability on which they thought they did well? Is the percent about the same as for the class as a whole?

   C. What proportion of these students reported that they participated only one or two times or not at all? (SECTION A, Q#6) Calculate a proportion of all the other students who chose either of these two responses. The percent for the low status students and the percent of other students who report little participation should be about the same if you have produced equal status interaction.

D. Were there some particular low status students for whom this experience was not a good one? Take those low status students who report little participation on Q#6 and examine their questionnaire as a whole to see if you can find out what the source of the trouble was.

V. How successful was each group in achieving equal status and good group process? (Rearrange the questionnaires so you have all the ones from each group together).

A. Did some groups report more interpersonal problems than others? Or were complaints pretty well spread across groups? (SECTION A, Q#7, #8, and #9) If three or more members of the same group make some complaint about their experience with the group on one of these items, one could reasonably assume that there was interpersonal difficulty.

B. In how many groups was the low status student chosen as having the best ideas? However, if you have identified about a fourth of the class as "low status" then 25% of the choices should be directed to these students--if you have achieved changes in competence expectations.

C. Were there groups in which almost everyone chose one of the low status students as having done the least talking? (SECTION B, Q#2). This is evidence of a group where you may not have achieved equal status behavior. Check the group's questionnaire over carefully. You may want to appoint this student as facilitator next time.

D. How were the evaluations of the facilitator in each group (SECTION B, Q#6).

E. If the low status student was a facilitator, was he/she chosen by at least some group members as having done the most to direct the discussion? (SECTION B Q#4).

VI. How good were the interracial relations? (Separate out students by ethnic or racial group membership).

A. Did most of the minority and majority students report getting along with most of all of the other students in their group? (SECTION A, Q#8). Were the proportions different for the different groups in your class or about the same?

B. What proportions said they would not like to work with their group again? (SECTION B, Q#5). Was this proportion about the same for the different ethnic or racial groups?

Still another way to analyze your questionnaire results is to pull out students who worked in the same group. Look at their responses on group process. Were there any particular groups reporting many problems? This group may need time to go over the group process skills; or you may decide that the entire class needs to work on some particular skill that you did not include in the early training. Examine the low status members of the group. Were they chosen by anyone as having good ideas or having done the most or least talking in the group? Did they report participating less than other members of the group? Looking at the data in this way you obtain a rare glimpse into a very important problem--how is the low status student perceived by classmates? Does this situation work for him/her so that he or she is participating and is receiving some favorable evaluations on class tasks from classmates? A well-chosen, well-executed multi-ability task should have this effect!

Finally, you might like to look at questionnaire results from the point of view of interracial relations. Do most of your students report getting along with most of the people in their groups? Do most of the students say they would like to work with this group again? Then the students are reporting a fair degree of interracial harmony because all your groups are interracial.

Do not be alarmed if some students report that they did not participate very much or are unable to list one ability on which they thought they did well. It is not realistic to expect that for any groupwork task, everyone is going to participate to the maximum and see themselves as doing very well. On the very next groupwork task, you will find that different people are participating strongly. The situation the instructor wants to prevent is a systematic effect in which the minority children, and/or the children with reading and math or language problems are consistently the low participators who do not rate themselves well and are not rated well by others.

Systematic interaction scoring. An alternative to the questionnaire method is systematic interaction scoring by an outside observer. This is much less difficult than it sounds. It is relatively easy to obtain a rough estimate of the rates of participation of different students. If you are fortunate enough to persuade an observer to visit the classroom, they can spend some time noting down answers to the questions you have provided in the Guide for Outside Observers; in a fifty minute session, there will also be time to do some systematic scoring. However, if time is short, it will be important for you to have everything ready and to have instructed your observer in the procedures you want. Each group should be observed for the same amount of time, say five minutes.

Select the "target students" you want to have observed. These may be any or all of the following: students with low academic status; minority students who have little social influence among their classmates; very quiet and non-participating students; students who present special behavioral problems. Next, make out a scoring sheet in which you draw the location of the various groups around the classroom, with a box to represent each student in each group. Finally, label the boxes in each group which represent target students. Point out the location of the target student within the group when the observer is ready to score that group. Figure III is an example of such a scoring sheet.

The observer should spend at least five minutes scoring each group. I am assuming that there will be five or six groups with four or five students each. The observer simply makes a "hash mark" for every speech a student makes relevant to the assignment. That speech can be as short as "OK" or it can run on for several minutes. A speech ends when the person stops talking or is interrupted by another speaker. The hash marksare entered inside the box which represents each person inside the group. It is very important to record the contribution of the target student. Sometimes errors will be caused by members of the group moving around and in and out of the group. Try not to let this happen for the target student. If the target student moves away from the group and ceases participating, it should be so noted. The observer has to stand close enough to the group so as to hear and see, but not so close as to make the students aware of what he/she is doing.

The tabulation and analysis of these data are very simple. What percentage of target and non-target students were never seen by the observer participating? If these proportions are about the same, then you are doing quite well in boosting the participation of students who are ordinarily low in participation. More precisely, you can examine the number of times the target student was scored in comparison to the number of times other people in his/her group were scored. The simplest way to do this is to compare the number of acts of each target student to the average number of speeches for other members of his or her group. Strike an average for the number of hash marks for every member of a particular group.

Then compare the target student's figure to the average figure for his or her own group. Are they below average? Are most of the target students below average? If the groupwork task has been effective in moderating status effects, some target students should be below average, some close to average, and some above. Incidentally, this method of scoring allows you to tell at a glance if some member of a group is dominating the group by talking far more than anyone else. If you are concerned that your facilitators are doing too much of the talking, point out the facilitators to the observer and be sure that the observer marks them down on the chart when keeping track of the speeches.

I have provided at the bottom of Figure III some sample calculations on the hash marks drawn in on the scoring sheets. These figures give an answer to the overall question of how well the target students are doing, relative to their classmates on participation. The figures for any single target student have to be seen with a good deal of caution because it may well be that the particular five minutes the group was being scored was not very representative of the group's pattern of interaction as a whole. This method of scoring has the advantage of objectivity, but the disadvantage of the limited nature of the conclusions one can draw from the numbers. The questionnaire has the advantage of richness of inferences that can be drawn but the disadvantage of the subjectivity of the responses.

Figure III

Sample Interaction Scoring Sheet

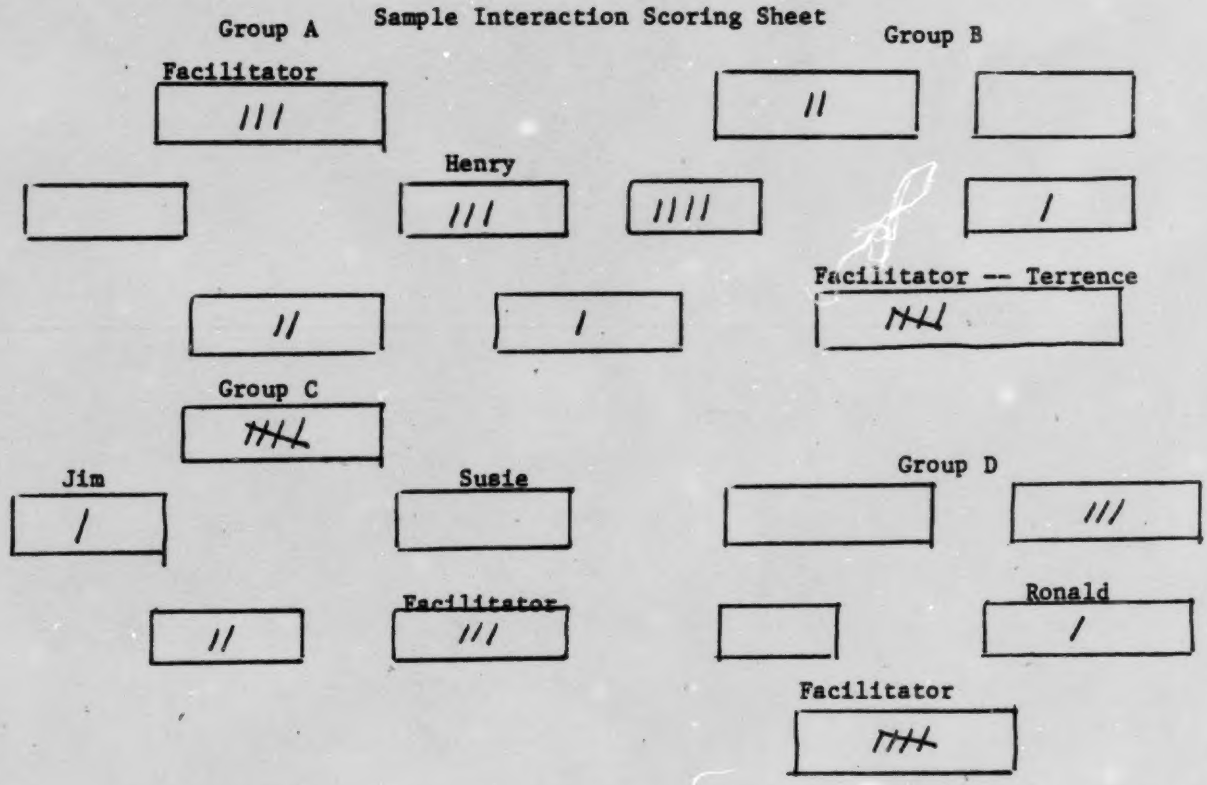


Figure III (continued)

Calculations

	Target Students	Other Students
Total Number	5	16
Number Who Never Talked	1	5
% Who Never Talked	1/5 = 20%	5/16 = 31%

Conclusion: A smaller proportion of target students than other students was never seen talking.

Group by Group Analysis

	Target Students	Other Students
Group A		
Number of Students	1	4
Total Number of speeches	3	5
Average Speeches per Student	3	5/4 = 1.25

Conclusion: Henry talked more than average for his group.

Group B Calculated the same way as for Group A

Deciding on a methd of evaluation. A teacher cannot become a full-time evaluator. Obviously, one has to pick a practical method of evaluation. It makes a lot of sense to try one of these at a time. As you gain experience it takes much less time to analyze the data. You may decide that a combination of methods gives you the best information if the methods do not take too much time.

Improving the groupwork. After pulling together everything you have learned from the evaluation including your own rough observations, come to some conclusions about how the next session of groupwork can be improved. It is very important to do this in a systematic fashion. It will be very much easier to do if you have a discussion with your observer where you force yourself to make some decisions in light of what you have learned. If you don't do this, it is all too easy to forget what you have learned and return to reliance on a vague overall judgement of "how it went." You are not a particularly good observer when you are trying to do something new and difficult like introducing and running groupwork. Furthermore, there isn't much point to going through the motions of systematic evaluation if you don't pay any attention to the data, and use it to make decisions.

Some decisions may have to do with altering groups of procedures for the next groupwork task for the present class. You might decide on which group skills need emphasis or review before the class goes on with more groupwork. Some may relate to doing this particular task better next year.

It is important to ask yourself whether or not there are some ways you could improve your own role. Can you improve your task introduction? Can you do better by delegating more authority to the groups and avoiding interfering with some of the groups? Did you ask the groups some good questions which led them to extend and expand their thinking? Write down your conclusions so you have some notes to look at when planning the next groupwork task.

One of the most surprising things is the enthusiasm you will see in your students for classes run in this fashion. You will find that students who continue to work in pretty much the same way in a continuing series of groupwork tasks, rapidly gain in skills and move quickly to their work in an efficient and constructive fashion. What has happened is that they have acquired new skills and internalized new rules for behavior--and so have you!

Evidence

The three-part strategy described above was tried out on an exploratory basis as part of the Stanford Status Equalization Project. Two of our staff members who were experienced teachers acted as a Stanford Support Group; they asked for volunteers from the staff of a large Grades 4-6 school who wanted to receive some assistance in learning to use small groups in their classrooms. Six teachers volunteered; and the Stanford Support Group worked with them on a collegial basis for three months in order to find out what were the practical problems of implementing research results in an ongoing classroom.

Perez (1980) made a special study of the six teachers who volunteered in comparison with seven who were willing to act as controls. She came to the conclusion that the teachers who volunteered were having more discipline problems, were less traditional in their methods of instruction, and were more critical of their own teaching skills. They wanted to learn how to do "small groups," because they believed in that kind of instruction. However, their own attempts had not been at all successful, partly because of their underlying disciplinary problems, and partly because of the lack of training and knowledge in this type of instruction.

This school represented a challenging setting in which to try to make changes in the middle of a school year. The school's population had an extraordinary social class range; there were 57% Black students who were largely working class. These were mixed with middle and upper status Whites and a small number of middle class Asians. There was no tracking so that each class contained a wide range of skills from students who could not read at all well to students who were reading at a high school level. There was a good representation of Black teachers on the staff and a Black vice-principal. The curriculum placed a strong emphasis on Black History and culture; the PTA was active and predominantly Black. The school represented a combination of a strong emphasis on academic performance with a social and cultural influence that was predominately Black.

All of our staff members who were experienced teachers made the same comment upon visiting these classrooms; they had never seen such active Black students. The Black children tended to demand a good deal of teachers' attention; the teachers worked hard to keep them engaged in their work and in their seats. There were relatively few teacher aides available; and the academic range and liveliness of these students made this a very difficult setting in which to teach. Furthermore, teachers had little preparation time and no official time to work with our staff. This meant that teachers had no opportunity to study the general principles which have been described in this book. They had to rely on brief memos from our staff and approximately eight classroom visits as well as conferences during lunch.

The general social climate of the school was an aggressive one. On a questionnaire instrument, the Multicultural Social Climate Scale, developed by Dr. James Deslonde, the students reported rather frequent physical and verbal conflict of all kinds. This conflict did not appear to be specifically interracial in nature, but reflected a predominantly lower class school climate. Whether or not this level of conflict was reflected inside classrooms depended on the disciplinary skills of the individual teachers. Many teachers were strict disciplinarians, making much use of whole class instruction and seatwork which they supervised closely. These classrooms were quiet, peaceful and orderly. In other classrooms, where teachers were attempting to give more autonomy to the children or were trying to use more individualization, the resulting discipline was variable. A few were highly skilled in managing this more complex kind of instruction. The rest were really having moderate to severe problems in controlling their classes; in these cases the aggressive climate of the corridors and schoolyard invaded the classroom.

We arrived at these conclusions over a two year study of the school, using systematic as well as informal clinical approaches to observations. In the first year of study, we carried out some studies of status problems in these classrooms.

Each student filled out a questionnaire on which he or she was asked to rank all the same-sex students in the class as to how good they were at reading. Students were defined as "low status" if their average ranking by their classmates on reading ability was low. In the school as a whole, there were many more Whites who were ranked as having High reading ability by their classmates than there were Blacks. Nevertheless, there were some classrooms where the higher ranking readers were Black as well as White.

We then composed four-person groups, all of the same sex, to play the standardized task of Shoot-the-Moon. Some of these groups had two White students who were seen as having higher reading ability. The other two members were Black students who were seen as having lower reading ability. In another set of groups, we used only Black students, with two having relatively higher reading status and two having lower status. Systematic scoring found that the "High" readers in all cases were much more influential than the "Low" readers. Whether or not there was a racial as well as a reading status difference in the group did not seem to matter. In other words, the reading ability acted as a strong status characteristic for the all-Black groups as well as for the interracial groups.

Implementation of Small Group Strategy

Most of the time of the Stanford Support Group in the classrooms was spent on rather elaborate preparation of the students for skills and norms for working in small groups. Students were grouped heterogeneously; they were given various discussion tasks, during which they practiced special behaviors such as giving everyone a chance to talk and listen. The staff adapted Epstein's Four-Stage Rocket for their use. See Figure IV.

Figure IV

The Four-Stage Rocket

Pre-Test

Choose an observer, someone to watch the group. Talk about the assigned subject for five minutes. The observer will write down what he thinks the group did during the duscussion.

Stage I **Conciseness** - getting quickly to the point and not beating around the bush

The observer for the pre-test will watch the clock and keep time for the group.

Keep on discussing the subject for five minutes, making sure that each person talks for only fifteen seconds.

Stage 2 **Listening** - paying attention to what is being said

Keep on discussing the same subject for five more minutes making sure that each person talks for only fifteen seconds.

But, each person must wait three seconds after the person before has spoken before he may speak.

Stage 3 **Reflecting** - repeating out loud to the group what the person before you said

Keep on discussing the same subject making sure that each person talks for only fifteen seconds and that he waits three seconds after the person before him has spoken before he speaks.

Also, no person may speak until he repeats to the group what the person before him said. This is called reflecting.

The person who had spoken before has to nod his head to mean YES if he thinks this reflection is right. No one may talk until he correctly reflects what the person before him said.

Stage 4 **Everyone Contributes** - all the people in the group have to speak

Keep on discussing the same subject for five more minutes. Make sure that each person talks for only fifteen seconds and that he waits three seconds after the person before him has spoken before he talks. No one may speak until he has correctly reflected what the person before him said.

Also, no one may speak a second time until everyone in the group has spoken.

Post-Test

Keep on discussing the same subject for five more minutes with no rules on the talking.

Try to use the skills of CONCISNESS, LISTENING, REFLECTING, and EVERYONE CONTRIBUTES in the discussion.

The observer will write down the difference between the pre-test and post-test that he sees on the observer sheet.

The Four-Stage Rocket
Observer Sheet

Observer:________________

Date: ________________

States	Names of people in the group					
1. Conciseness talks for 15 seconds						
2. Listening waits for 3 seconds before talking						
3. Reflecting repeats correctly						
4. Everyone Contributes talks in group						

This was followed by more discussion tasks during which the students practiced a set of "Work Behaviors" such as giving new ideas or suggestions, "Helping Behaviors" such as willingness to change one's own ideas to help the group; and the avoidance of "Troublesome Behaviors" like "attacks other people." These behaviors were all presented to the children on charts--see Figure V.

Figure V

IMPROVING GROUP PROCESS SKILLS

This list of group roles or ways that a group acts is divided into three parts:

WORK BEHAVIORS are ways which help to get the group's work done.

HELPING BEHAVIORS are ways which help the group to keep working smoothly altogether.

TROUBLESOME BEHAVIORS are problems that come up between the people in the group and stop them from getting their work done.

WORK BEHAVIORS are ways which help to get the group's work done.

1. has new ideas or suggestions.
2. asks for or gives information
3. helps to explain better
4. pulls ideas together
5. finds out if the group is ready to decide what to do

HELPING BEHAVIORS are ways which help the group to keep working smoothly altogether.

1. helps people get together
2. brings other people in
3. shows interest and kindness
4. is willing to change own ideas to help the group
5. tells others in a good way how they are behaving

Figure V (continued)

TROUBLESOME BEHAVIORS are problems that come up between the people in the group and keep them from getting their work done.

1. attacks other people
2. won't go along with other people's suggestions
3. talks too much
4. keeps people from discussing because does not like the arguments
5. shows that he does not care about what is happening
6. letting someone boss the group
7. not talking and not letting others know your ideas
8. tells stories about himself and keeps the group from getting their work done

IMPROVING GROUP PROCESS SKILLS

WORK BEHAVIORS

Observer:____________________________

Date:________________________________

Behaviors	Initials of People in the Group				
I. has new ideas or suggestions					
II. asks for or gives information					
III. helps to explain better					
IV. pulls ideas together					
V. finds out if the group is ready to decide what to do					

Figure V (continued)

SMALL GROUP

HELPING BEHAVIOR

Observer: ____________________

Date: ____________________

Behaviors	Initials of People in the Group						Total
1. Helps people get together							
2. Brings other people in							
3. Shows interest and kindness							
4. Willing to change own ideas to help group							
5. Tells others in a good way how they are behaving							
Totals							

Figure V (continued)

IMPROVING GROUP PROCESS SKILLS

TROUBLESOME BEHAVIORS

Observer:____________________________

Date:_______________________________

Behaviors	Initials of People in the Group					
I. Attacks other people						
II. Won't go along with other people's suggestions						
III. Talks too much						
IV. Lets someone boss the group						
V. Does not talk						
VI. Not caring about the group's task						
VII. Tells stories to keep group from getting work done						
VIII. Does not discuss to avoid fights						

Figure V (continued)

SMALL GROUP WORK

OBSERVER SHEET

Observer:________________________

Date:____________________________

							Total
Group Members							
Bossy people							
Quiet people							
Good listeners							
Interrupting people							
Helping others talk							
Total							

Throughout this whole set of disussion tasks, there was a student assigned to an observer role. The observer took down the initials of the people who exhibited the behavior being practiced; the observer was responsible for reporting during the wrap-up session, how many times he or she recorded various kinds of desirable (or undesirable) behaviors. A sample of the scoring sheet is provided in Figure V. In all, there were six different discussion tasks employed. Group composition was frequently shifted, so that the students would become accustomed to working with every other student in the class. The observer role was rotated.

After this phase of the in-service ended, the teacher was to incorporate groupwork into his or her regular curriculum activities. The staff spent some time discussing how this might be done; and each of the volunteer teachers staged at least one demonstration lesson using groupwork techniques.

Facilitator role. At this time the staff suggested to the teachers that they should shift from the use of the observer role to that of a facilitator. A major function of the facilitator was to enforce norms (like behaviors in Figure IV and V) that had already been learned as part of the initial curriculum on group skills and norms. In a memo on this subject, the staff recommended that the following rules for group behavior should be enforced by the facilitator, (1) Give eveyone a fair turn; (2) Give reasons for ideas; (3) Give different ideas; and (4) Listen to each other's ideas. Teachers were urged to allow low achieving students to play the facilitator role. See copy of memo--Figure VI.

Figure VI

Stanford University
School of Education
Center for Educational Research at Stanford

STATUS EQUALIZATION PROJECT

March 28, 1978

Suggestion for Use of Student Leaders and Student Observers

When you introduce small group tasks in the content area it may be helpful to retain the student observer or student leader role.

The student leader can become directive in the group. They may remind and direct the group members on the various behaviors (or selected behaviors you have given them to observe that day) they have been prepared to observe for. Rather than simply observing and reporting they may become more directive (not punitive) and active in the groups.

Another approach may be to identify a new role as you move into the content area, e.g., Student Group Leaders. We have prepared Charts for this purpose which you may want to use if your group task involves the form of the discussion technique.

Student Leadership Chart:

1. Give everyone a fair turn
2. Give reasons for ideas
3. Give different ideas
4. Listen to each other's ideas

When other tasks are involved you may wish to select other behavior charts to have the student leader use.

The student leaders can be relied upon to get the groups started on their tasks with a minimum of direction from the teacher.

We also suggest that the leaders should be trained before they are assigned to groups. This can be done during recess, lunch time or other times of the day when seatwork would permit you to work with the student leaders. Below are suggestions for training.

Examples of questions the teacher can address to the students in order to make sure that everybody understands what it is to be a good leader.

A. Teacher using student leadership chart: "You as a Student Leader needs to:"

   1) Give everyone a fair turn: teacher asks children to talk about it and ask the following:

      a) What might you, as leader, say if someone doesn't say anything? . . . Remember, it's your job to get ideas from your group.

b) If someone talks too much, what might you as leader say? ... If the following is not suggested the teacher can give this example: "We have lots of ideas from you, Greg; let's see what Mary has to say."

c) What could you do if no one says anything at first? ...(The teacher suggests: "Give some ideas of your own. Then ask different members what they think about your ideas") as soon as they start talking you can act like one of the group again. (Talk but don't be a teacher or a person in charge) try to get them to talk to each other...not just to you, the leader. Ask them what they think about each other's ideas.

B. Teacher points to SUGGESTION II: "You, as a leader also will need to:"

2) Help the group give reasons for ideas: teacher asks children to talk about it. You may give examples of questions such as:

a) "How can a leader get his group to give reasons for ideas?" (If the following are not suggested the teacher will give these examples:

- "Do you agree, Tom?"
- "Why do you think so? OR Why don't you?"
- "How do the rest of you feel about John's ideas?"

C. Teacher points out to SUGGESTION III:

3) Help the group ask for many ideas: teacher asks children to talk about it:

a) How can a leader help the group talk about lots of ways to answer a question? (If the following are not mentioned the trainer might suggest:

- "Do you have any other ideas?"
- "Can you give an example of what you mean?"
- "Tell us more why you think so," etc.

D. Teacher points to the REMINDER:

"Everyone must agree on the answer."

The teacher might say: "This is a very important rule for a group discussion task."

a) "How can we help our group agree on one answer?" (If not suggested by the group, the trainer may suggest the following:)

- "We have some ideas for an answer; now let's decide which is the best one." "Let's choose the idea we will give as our group's answer."

REMEMBER: Any of the group behavior charts may be used in the same manner when training student leaders or student observers, e.g., Four-Stage Rocket, Work Behaviors, Helping Behaviors, or Troublesome Behaviors.

Multi-Ability definition of the task. In this in-service program the approach of introducing tasks as "multi-ability" was not strongly used. Most of the children in treated classrooms had been exposed to an experimental one-week Multi-Ability Curriculum prior to the in-service. However, no systematic attempt was made to continue with multi-ability definitions of new groupwork tasks that were introduced by the teacher. The Stanford staff did discuss multiple abilities when they first entered the classrooms and began the first discussion task of the curriculum on cooperative norms. The teachers did not continue multi-ability definitions of groupwork tasks they used as demonstrations at the conclusion of the in-service program.

Evaluation of Training for Small Groups

Gamero conducted an evaluation of the work of the Support Group in producing cooperative groupwork and equal status behavior in these classrooms. She was present as an observer for each classroom session in which the support staff came in to work with the children and the teacher (Gamero, 1981). These classrooms had been experiencing discipline problems and had little previous experience with such heterogeneously composed groups. Gamero concluded that these factors made the intitial attempts to organize the class into small discussion groups quite chaotic. It is clear that if a teacher does not have good control of the class, or if the students are fourth graders (or immature fifth graders) outside help is necessary at this initial stage. (Teacher aides, parent volunteers, or high school students would be adequate.)

The children resisted being composed into groups of classmates who were not their friends. It turned out that they did not understand that adults must work with people in groups whom they may dislike. After this ordinary fact of adult life was explained, the students became much more willing to work in groups composed by the staff.

At the beginning of the curriculum, the children were often quite aggressive with each other, particularly in the classrooms which had more severe discipline problems. As the learning of new cooperative behaviors proceeded, this began to disappear.

Many of the group processes used in this training program were not all equally successful or important. At least for the first training for cooperative norms, Gamero recommended using a shorter list of behaviors. She felt that the basic skills set out in Epstein's Four-Stage Rocket would be sufficient for a start, with later behaviors added as they became necessary during academic groupwork. In conjunction with the shortened initial training for small group behaviors, a shift from the use of a group observer to that of a facilitator at the conclusion of the Four-Stage Rocket would assist students in moving more rapidly to the group format that they would experience in academic groupwork. Furthermore, the facilitator role has great potential for enforcing cooperative norms as well as for providing leadership opportunities for children who are relatively powerless in the social "pecking order" of the classroom as well as the children with low academic status.

In order to make a systematic evaluation at the conclusion of the in-service program, Gamero constructed a standardized group task for the students in the six treated classrooms. She contrasted the response of the students to a groupwork task in these classrooms to that of students in three untreated classrooms in the same school (all students of the fourth, fifth and sixth grades). This final evaluation was made one month after the in-service program ended. The teachers who had received in-service had continued to use small groups on their own after the end of the formal training program (Ahmadjian, 1980). The teachers in the control classrooms made much more frequent use of large groups, rarely used small groups; their students were typically hard at work on seatwork or quietly paying attention to the teacher.

Gamero's method of evaluation was a standardized role play, given by two adults speaking from a script. The role play concerned a moral dilemma involving school children of the student's age. This story is told in Figure VII. The groupwork task was to reach a concensus on the best solution to the dilemma. There was a person assigned to a facilitator role in each group. Expected behaviors were on a chart: Give everyone a fair turn; Give reasons for ideas; Give different ideas; Listen to each other's ideas. The facilitator was referred to as a "Leader" and was told that it was his or her job to see that these behaviors took place. (See Figure VII for detailed instructions used in this task.)

Figure VII

SMALL GROUP DISCUSSION

PRESENTATION OF THE TASK: "MONEY FOR SANDRA"

I. Introduction:

Today we are going to put on a little play for you. Maria and Sandra will play the part of sixth grade students very much like you. The play will be about a "moral dilemma."

A "moral dilemma" is a problem where people cannot easily decide what is the right thing to do. Neither decision will make both actors happy.

You must watch and listen very carefully because you will have to decide, after watching the play, what is the right thing for Sandra to do.

After you have seen what the problem is, you will discuss in a group the best solution to the problem. Please listen to them, carefully.

II. Roleplay: 5 minutes

Figure VII (continued)

III. Instructions:

Is there any questions about the situation? Are you all clear what happened? Then, we are ready to try to come to agreement on what is the best answer to these questions on the poster:

> What should Sandra Do? Return the coin or not?
>
> Give reasons for your decision.

IV. Small Group Discussion:

Instructions:

1) You will now discuss the problem as a group, for 15 minutes.
2) The class will break up into small groups of five.
   (Names will be read off by the instructor).
   There is one person in each group who will play the role of a facilitator. (Here the instructor appoints a facilitator for each group).
   This is the job of the facilitator.
   (Here the instructor shows the student Leadership Chart).

Student Leadership Chart

1. Give everyone a fair turn.
2. Give reasons for ideas.
3. Give different ideas.
4. Listen to each other's ideas.

Remember: Everybody must agree on the solution made by the group.

3) At the end of the session, your group must select a person who will make a report about the group's solution to the problem, and explain why they arrived at that decision.
4) Then the instructor asks the group to start the discussion.

At the end of the small group sessions, after children have given the reports, we could ask them:

-- 1. Does anyone want to comment on why we come to such difficult ideas?
-- 2. Does anyone want to comment on what they think were good ideas?
-- 3. We need to point out that is is OK to think up a new solution to the problem. For example: at Nixon, children found a way to give it back and get a reward too.

OBSERVER ROLE *

1. The observer should tell the facilitator that it is his/her job to get the group sitting closely together.
2. If the group appears to be coming to a conclusion much too early, she should say: "I'm not sure that I heard that you all agreed. You have to give reasons."
3. The observer has to remind the group after they have reached agreement, that they must pick a reporter. Should not let facilitator think that he or she is necessarily the reporter.
4. Remind the group that they have only 15 minutes to discuss and find an answer to the problem.

   It would be advisable to warn the group to arrive at a conclusion, if they haven't yet done so, when only 2 minutes are left, so they will have time to choose the reporter and to give reasons for their decision.

---

*These were instructions to the paid observers who scored interaction of discussion groups.

MONEY FOR SANDRA - THE MORAL DILEMMA

The Problem

The issue is honesty: if someone has cheated you, is it fair to cheat him in return? Maria owes Sandra fifty cents she has borrowed but not paid back in spite of Sandra's repeated requests. Sandra has a chance to get her money back—by stealing it in a way that will cause Maria much trouble.

Introducing the Problem

Say to the group, "Have you ever lent something to a friend--who just never gets around to giving it back? If you have, you can remember how provoked you felt. This story is about such a happening.

Sandra had put her foot on a shiny half dollar.

Nearby, on hands and knees, Maria was searching through the grass, carefully parting the blades to peer between them for a silvery telltale glint.

"Sandra, help me!" she pleaded. "I lost my half dollar!"

"Too bad," Sandra said. "Too bad you didn't pay me what you owe me before you lost that money."

"Oh, I couldn't pay out out of that half dollar!"

"Oh, no?" "Well you are, chum, you are," Sandra said to herself. She was really disgusted with Maria. She had lent Maria two bits for a movie just a week before, when Maria already owed her for a hot dog and a coke. But Maria who was good at mooching always managed to forget any debts she owed.

"I couldn't pay you from that half dollar," Maria explained, "because it isn't mine. Besides, it's special. It's a coin from my Dad's collection. I brought it to school to show to the teacher. He collects coins. I didn't tell my Dad I was taking it. He doesn't like me to mess with his collection. Besides, this coin isn't worth just fifty cents. It's scarce, so it's worth a lot more. Dad'll really be sore!"

So you're in trouble, Sandra thought. Well, go ahead and squirm. You got it coming to you. Then Sandra thought of Maria's father. He'd really be rough on Maria.

Sandra almost lifted her foot, almost said, "Hey, look--" but checked the impulse. Maria needed a lesson.

But this would be so tough a lesson----

MORAL DILEMMA: What should Sandra do? Return the coin or not"

Groups

Children in each classroom were composed into five groups of five or six members. A "Low" Reader was always assigned the facilitator's role. The groups were mixed as to sex, reading ability and race. For two groups in each classroom, there was an adult observer who did systematic scoring of behavior and used a tape recorder to record the discussion. The other three groups in each classroom filled out a questionnaire following the groupwork, along with the two groups who were scored. This questionnaire contained many of the same items included in the sample questionnaire earlier in the chapter. Altogether there were 41 groups with 13 in the three untreated classrooms and 28 in treated classrooms. See Figure VIII for the design of this evaluation.

Figure VIII

Design of Systematic Small Group Evaluation

	Groups observed + tapes + post-meeting questionnaire	Post-meeting questionnaire only
Treated classroom (N=6)	18 groups	10 groups
Untreated classroom (N=3)	9 groups	4 groups
	Total - 27	Total = 14

Grand Total = 41 groups

Results. Systematic scoring of the contributions of each member of the observed groups revealed that Low Readers were more active in groups in the classrooms receiving in-service, than in groups in untreated classrooms. Table 1 presents these findings. For each group observed, Gamero calculated the percentage of acts which came from Low, Medium, and High Readers (excluding the facilitator). She then took an average of all such percentages for Low Readers in treated and untreated classrooms. Table 1 shows that Low Readers

Groups contributed an average of 29% of all acts in treated classrooms, but only 20% of all acts in untreated classrooms. (This is a statistically significant difference). Actually, in the treated classrooms, Low Readers contributed, on the average, more than the High Readers or the Medium Readers; this is not true in the untreated classrooms.

Table 1

Average Percentage of Initiation by Students in Small Groups, According to Reading Ability and Treatment Condition (Excluding the Facilitators)

Reading Ability	Treated	Number of Students	Average Percentage of Acts Initiated**	"t" Ratio
Low	Yes	17	29.39	1.888*
	No	7	19.59	
Medium	Yes	31	21.28	0.895
	No	18	27.69	
High	Yes	23	25.69	0.926
	No	11	24.05	

p < .05
** The reason that the percentages shown in this table do not amount to 100% is because we took out the scores of some students who presented problems of proper identification.

In addition to these findings on participation relevant to the task, groups in treated classrooms showed more pro-social behaviors than groups in untreated classrooms. Despite the observably "rocky" start they had in the beginning of their groupwork training, there were few troublesome behaviors observed in the groups in treated classrooms (or in groups in untreated classrooms). Students in treated classrooms were more likely to ask for each other's opinion and to give favorable evaluations of each other's ideas. Table 2 gives the average number of these cooperative behaviors per group in treated and untreated classrooms. Again the treated groups are significantly more likely to show these behaviors. Furthermore, groups in treated classrooms were more oriented to their own interracial group as a social unit. When asked as to who had the best ideas, they were much more likely to put down on the questionnaire "the group" as their answer, even though the questionnaire specifically asked them to name a person. Thirty-six percent of the treated students put down "the group" as their answer as opposed to 20% in the untreated groups. See Table 3.

Table 2

Average Number of Cooperative Acts per Group for Treated and Untreated Classrooms ("Positive Evaluations" plus "Action Opportunities")

Treated	# Groups	# Cooperative Acts	$\bar{x}$ Cooperative per Group	t-Value
Yes	18	100.97	5.61	1.92*
No	9	39.31	4.37	

*$p < .05$, t-level of confidence set at $p < .05$; 25 d.f.

Table 3

Treatment and Probability of Chosing "The Group" as Having the Best Ideas

Treated	Chose the Group	Individual	Refusal to Answer	N	X^2
Yes	51 (36%)	77 (54%)	15 (10%)	143	10.773*
No	13 (20%)	34 (53%)	17 (27%)	64	

*Level of significance for X^2 was set at $p < .05$; d.f.

Groups

The intellectual quality of the group discussion was different in the two sets of classrooms. Gamero scored the recorded group discussions for the number of "reasoning" statements participants offered. These were selected from the tape recorded discussion on the basis of certain cue words such as "I think that...," "because," "probably," etc. The average number of reasoning scores was calculated for groups in the two sets of classrooms. There was an average of 24 reasoning statements per group in treated classrooms and only an average of 16 per group in the untreated classrooms (again a statistically significant difference). These differences may be seen in Table 4.

Table 4

Average Number of Reasoning Scores per Group (Treated versus Untreated), in a 15 Minute Small Group Interaction Session

Treated	# Groups	Total Reasoning Scores	X Reasoning Scores per Group	t-Value
Yes	18	434	24.11	3.197*
No	9	140	15.55	

*t-level of significance set a $p < .05$; 25 d.f.

There was no evidence that the program was successful in changing competence expectations of reading status. It should be recalled that training students in norms for equal participation was based on the treatment developed by Richard Morris (1977). Such a treatment does not, by itself, attack competence expectations but only superimposes norms for equal participation on the group's behavior. Morris, himself, did not find evidence that participants in his experimental groups thought the Low Readers had any better ideas than participants in the control groups (1977). The same finding occurred in this evaluation of the small group training.

When all the groups were asked on the questionnaire as to who had the best ideas, the High Readers were selected 56% of the time in both treated and untreated classrooms. But the High Readers represented only 30% of the students in the classrooms. Thus, they were 26% more likely to be chosen as having the best ideas than would be expected if reading status had nothing to do with perceptions of competence in discussing the moral dilemma. The Low Readers were only picked 14% of the time in treated classrooms and 21% of the time in untreated classrooms, although they represented 26% of the students in the treated classrooms and 31% of the students in the untreated classrooms. Thus, the Low Readers were between 10 and 12% less likely to be chosen as having the best ideas than if reading status were not important in evaluating competence. Being in a treated classroom did nothing to improve this situation. These figures are all given in Table 5. Overall, the High Readers were still seen as more competent, even though the task was completely non-academic and involved a purely moral issue.

The final result concerns the Low Readers who played the role of facilitator. These students did very well in the eyes of the group members in both sets of classrooms. They were evaluated favorably on the group questionnaire. Particularly in the treated classrooms, the Low Readers had a high evaluation of their own performance as facilitators. A listener to the recorded discussion would note some differences in the way that facilitators in treated classrooms, who were trained for the job, behaved in contrast to the untreated facilitators. In untreated classrooms, the child who played the facilitator often insisted on giving out turns to speak to each person. In treated classrooms, the facilitator was less obtrusive and the discussion was more open and spontaneous.

Table 5

Students' Relative Influence Measured by the Percentage of Choices Given to Students as Having the Best Ideas in the Solution of the Small Group Task (Within Reading Ability and Treatment Condition)

Reading Ability	Treatment	Total # of Choices	Observed % of Choices	# of Students	Expected % of Choices	Differences Between Observed and Expected % of Choices
High	Yes	77	55.84	43	30.07	25.77
	No	34	55.88	19	29.69	26.19
Medium	Yes	77	29.87	62	43.36	-13.49
	No	34	23.53	25	39.06	-15.33
Low	Yes	77	14.29	38	26.94	-12.65
	No	34	20.59	20	31.25	-10.66

*Calculations for this table were based on the total choices given to specific students (77 choices in treated groups and 34 choices in untreated groups). The rest of the choices were either given to the group as a whole or were refusals to answer the question. (The number of groups and students in Table 4 is higher than in the earlier tables. Since these were questionnaire responses we could include all those criterion task groups which were not directly observed. Altogether there were 143 students in treated classrooms and 64 students in untreated classrooms.)

Interpretation. The small group process curriculum was successful in much the same way as the Morris laboratory treatment was successful. The norms for equal participation did much to boost the participation of the Low Readers in the treated classrooms. The result was equal status participation in groups in treated classrooms.

The use of the facilitator is an especially practical and promising technique. Even without previous training (as in untreated classrooms), the use of this role did much to prevent High Readers from dominating the interaction in both sets of classrooms. Even in the untreated classrooms, the Medium Readers were more active than the High Readers. In these well-disciplined classrooms, the facilitators were able to function quite well even without training. In the treated classrooms, where the facilitator was somewhat more likely to think well of his own performance, we see real possibilities for raising competence expectations over time as Low Readers have repeated opportunities to play such leadership roles.

Although the behavior showed equal rates of participation by low and high status children (the Low Readers were mostly Black), there was no evidence that the competence expectations for Low Readers were equal to that of High Readers in treated classrooms. Evidently, the multi-ability strategy was not employed strongly and was not sufficiently explicit. In retrospect, it appears that the teachers never had the chance to practice viewing tasks as involving different abilities. This strategy is not an easy one, because teachers and curriculum developers are not accustomed to analyzing school tasks in this way. In addition, the in-service program did not stress this strategy nearly as strongly as they did the reinforcement of cooperative group behaviors. The classroom observers, used in the last month of the school year, never saw the teachers using multi-ability introductions.

Despite its limitations, this curriculum had much to recommend it from the point of view of interpersonal behavior in a desegregated classroom. There was evidence of much pro-social behavior in a climate where we had observed considerable anti-social behavior. Gamero found very little troublesome behavior in the group task even in classrooms which had displayed chaos in the first groupwork practice sessions. Children in the six teated classrooms were more likely to agree with the statement on a questionnaire, "It is important to learn to work with people you dislike" than were children in seven untreated classrooms (Perez, 1980). Interracial groups in the treated classrooms were more cohesive as measured by the spontaneous judgement that "the group" had the best ideas. Finally, there was much more reasoning in the discussion groups in treated classrooms. On the whole, the in-service program achieved a more humane, rational discourse, certainly a highly desirable outcome for the integrated classroom.

What Was Learned

In this chapter I recommended a three-part strategy to the teacher: training for group process; use of a facilitator role; and multi-ability tasks with explicit multi-ability introductions. This recommendation comes as a direct result of the field experience I have just described. Evidently two of the three strategies, in this case, were effective in producing equal status participation and desirable interpersonal interchange. The third part, the multi-ability strategy, needs to be much stronger in order to change competence expectations which are still based on reading, even where it is not relevant to the situation. It is not enough just to use multi-ability groupwork tasks—the fact that they involve separate abilities must be clear in the students' minds. They must have the opportunity to be evaluated favorably by their peers on these new abilities. Unless the experience is made very explicit, I do not think it is possible to change competence expectations in an ongoing classroom situation. It should be recalled, that we know that it is entirely possible to have students think well of the ideas of Low Readers in a non-academic task. The Rosenholtz Multi-Ability Curriculum demonstrated that this is possible when children have really had the opportunity to perceive the separate abilities involved in a task.

I have been frank about the problems experienced in these lively desegregated classrooms--particularly about the help that is necessary for younger classrooms and where teachers have had problems with discipline. But it can clearly work even under difficult conditions. Most important, there appears to be little risk of such procedures.

When you try it out for yourself, you too should be critical as we have tried to be. Ask yourself how well each of the theoretical strategies worked in your class. Try to improve on what you are doing as you go along, using some of the evaluation tools provided in this chapter. Our experience has been that it won't be very long before other faculty members will want you to show them how to manage classrooms in this dynamic fashion. I would like to close here with the response of one of the participating teachers to the question, "Do you have any plans for changes in your instructional pattern next fall?"

> "I plan to use the small groups set-up more. If you can get the standards assimilated, the groups could go along fine by themselves. Maybe within our teacher groups we can get these groups started within each other's classrooms. Maybe to begin with we would need more adult bodies and we could get our aides involved. I'm really pleased with what we've been able to accomplish. Some kids would have gotten so turned off by themselves on academic tasks. A lesson that is not exciting can be exciting in a small group. For example, the academic lesson that we presented, they would not have gotten through by themselves and in the group they all came up with good answers. It was a challenge and they accepted it."

Chapter X

The Multi-Ability Classroom

The Multi-Ability Classroom is a set of recommendations for permanent changes in the task and evaluation structure of classrooms. These changes are calculated to increase active, engaged learning behavior on the part of low status students and to provide enriched detailed feedback to the student on how he or she is doing on many different and specific skills.

These recommendations are designed to change expectatons for competence held by classmates for each other and by the student for him/herself. Instead of a set of consistent expectations for a student, based on how "smart" or "dumb" he or she is, the teacher introduces multiple intellectual abilities on which each student developes mixed expectations for competence, not just consistent by high or low expectations.

I have reserved this chapter for the last because the skills of groupwork are integral to the multi-ability model. But this set of changes goes beyond groupwork to attack features of the classroom which build and reinforce the academic status order. In my view, the source of the problems is in the conception of human ability held by teachers, parents and students. Human ability is seen as essentially unidimensional; and reading ability serves, in people's minds, as a perfectly good measure of a student's intelligence. Perhaps, it is because of this belief that educators do not worry about a curriculum which makes reading and writing a strict prerequisite for participation and success at almost all classroom tasks after the fourth grade. If the teacher believes that a student who is still having problems with reading at this age has limited intellectual capability, then the teacher may assume that he or she would fail even if the instructions and background were comprehensible. I can't think of any other reason why one would set up so many children for certain failure by design of learning tasks--unless teachers believe that these children are more or less permanently and inherently limited.

As a sociologist, I can put this fundamental problem in another way. As long as teachers see their job as one of sorting and selecting the "winners" in the world of school from the "losers," then it becomes perfectly acceptable to consign a fair proportion of the class to permanent academic failure. Many educators, especially secondary school teachers, do see their job as one of cultivating the talented for further education and for eventual entry into the more highly prized professional and business jobs. Other educators see their job as one of maximizing academic success for as many students as possible.

In my years as a teacher of teachers and a researcher of schools, I have met many teachers who want desparately for every child to succeed in their classes. They have, however, carried over into their methods of teaching, beliefs about ability, evaluation methods and grouping techniques which encourage failure on the part of the students they most want to help. No one has ever suggested to them that the social structure of their classrooms may be preventing them from reaching their own teaching objectives. These are the teachers I want to talk to about the Multi-Ability Classroom.

Conceptions of curriculum are closely related to conceptions of human intellectual ability. If there is no other way to be "smart" other than through reading, then there is nothing wrong with a curriculum which makes reading a prerequisite for success on every classroom task. Even in mathematics, I find that children are required to read word problems in order to demonstrate their understanding of mathematical concepts on standardized achievement tests. It seems to bother comparatively few educators and testers that failure to do the word problem correctly may be due to a reading deficiency rather than a conceptual skill problem.

In a multi-ability classroom there are many legitimate intellectual methods of solving problems; and a far wider range of tasks are suitable as media of instruction. Reading becomes a useful feature of communication in connection with these tasks; written materials allow the teacher to present vital information about how to do the task, a new vocabulary, and other instructions necessary for the learning process. The difference between conventional classroom instruction and what I am recommending here is that in a multi-ability classroom, it is now legitimate for students to ask each other for help in reading and understanding these materials. It is often one of the specific duties of a member of the group to see to it that everyone understands the written instructions. However, this is only one of the many relevant skills which are explained by the teacher as being important for the learning activity involved.

Definition of a Multiple Ability Classroom

What then is a multiple ability classroom?

> The multi-ability classroom has many dimensions of intellectual competence. No one student is likely to be rated highly on all these dimensions. Each individual is likely to be rated on at least one dimension. Thus, there are no students who are generally expected to be incompetent at new tasks and no students who are generally expected to be superior regardless of the nature of the task. In a multi-ability classroom one's skill in reading represents only one important competence; it is not an index of general expectations for success at all classroom tasks.

Basically, this goal is achieved through changes in the task and evaluation structure. There are a much wider variety of academic tasks. Small heterogeneous groups are frequently used as part of the regular curriculum. The teacher takes deliberate steps to insure that students do not make evaluations of each other and of themselves along a single dimension on intellectual capacity. Because every student can show satisfactory success on some of the tasks and because they receive individualized evaluations, they develop mixed expectations rather than uniform expectations for competence.

Why Should a Teacher Change?

Changing the way a teacher ordinarily works is a costly procedure--and by this I do not mean in dollars and cents. It is costly in terms of the risk of disorder in the classroom, in terms of extra effort spent in preparation and in the necessity to evaluate and adjust new procedures. It is far more comfortable to stick with tested methods of instruction.

Impact on learning. Many teachers are vitally concerned with the failure of some of their students to make good academic progress. These are the students who are often disengaged from their tasks, who participate very little in academic recitation and discussion, and who fail to put out the requisite effort needed to make up for their deficiencies. Many recent studies demonstrate the connection between active learning time and test scores. Recommendations by the researchers include improvement of classroom management, and more direct instruction. However, some students fail to respond to the best organized teachers--there is really no way to "order" a student to put out effort and become engaged in a learning task.

If the task structure is changed from one with individual or whole class work to small groups or multi-ability activities, you will find that student engagement improves dramatically as well as academic participation. This connection has been demonstrated in previous classroom research (Hess and Takanishi, 1974; Berliner, 1978). Furthermore, the Beginning Teacher Evaluation Study found that two features of the learning environment which were closely related to each other were positively correlated with achievement in Grade 2. These were the degree to which students took responsibility for their classwork, belongings and classroom and the degree to which students helped each other, shared materials and worked together (Berliner, 1978).

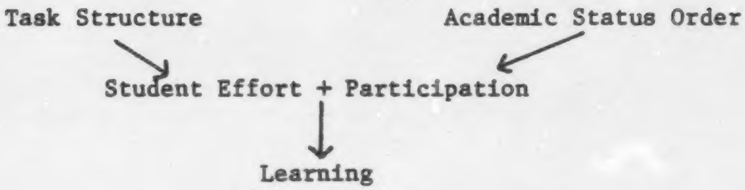
Thus, the recommended task structures should impact engagement and active learning time. These improvements should, if current research and theory are correct, have a favorable dramatic impact on learning for low achieving students. It is significant that Berliner found engagement rate to be a powerful predictor of learning across all four quadrants of achievement in reading and math at Grades 2 and 5.

However, it is not enough to change the task structure. Even if there are many small groups in the classroom, the effects of academic status differences will depress the participation rates of low status students within the heterogeneous small groups. Thus, the simple use of small groups, although boosting the participation and engagement rate of low status students in comparison to ordinary seatwork, will still not make that participation equal to that of high status students. To accomplish that goal, one must still treat the status problem in some or all of the many methods we have recommended in this book.

These relationships of task structure and the academic status order to learning are pictured in Figure I. Note that both task and academic status orders are seen as having independent effects on participation and effort on the part of the students.

Figure I

Social System of the Classroom



Thus, one good reason a teacher should consider changing a task structure and treating the academic status problems is to improve the learning outcomes for students with low academic status. This may be particularly important for teachers working with academically heterogeneous classrooms.

Impact on interracial relations. The multi-ability classroom is obviously of special advantage for the teacher of a desegregated classroom. If the White children discover that Black children who may be poor readers have much to offer on other relevant intellectual dimensions, the stage is set for social integration and the reduction of stereotypical beliefs. Clearly, the more radical changes recommended in this chapter are preferable to the limited introduction of cooperative multi-ability tasks recommended in the last chapter. A successful multi-ability classroom should yield equal status interaction in small interracial groups and improved effort and engagement on academic tasks on the part of the minority children who are working behind grade level in the basic skills. I will present some relevant evidence on this argument.

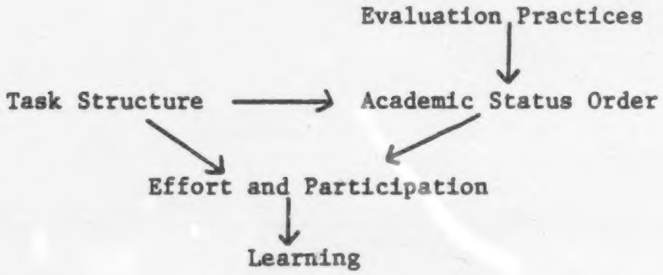
Impact on bilingual classrooms. Bilingual classrooms often present the teacher with unusual academic heterogeneity. Students have varying degrees of proficiency in spoken English and often show great variation in ability to read in any language. The multi-ability classroom has a special bonus for the bilingual classroom. Through increasing active verbal participation by changing the task structure and treating the academic status order, the students obtain important active practice in oral English. They will be found talking to their peers on academic subjects as often as three times per minute. Language experts highly recommend active practice in a functional context for increasing English language acquisition. I will also present some direct evidence on this point later in this chapter.

Conventional Instruction and the Academic Status order

I have recommended that teachers change their methods of evaluation of students in order to modify the effects of the academic status order. Evaluation practices appear to be one important feature of classrooms that helps to build and reinforce generally low expectations for competence on the part of some students. That is why groupwork, by itself, is not enough to create a multi-ability classroom. Even if we were to create equal expectations for competence on some groupwork tasks, the regular evaluation system in the classroom would reconstruct the academic status order we had just treated. In many classrooms the choice of tasks goes hand in hand with the evaluation practices to encourage the students to make invidious social comparisons, helping to strengthen the belief that some students are pretty much hopeless when it comes to learning. Figure 2 diagrams these connections in order to illustrate the pivotal role of evaluation practices in creating and maintaining academic status order effects on learning. It shows how evaluation practices plus task structure help to create and maintain agreement between students on the academic status order.

Figure II

Evaluation in the Classroom Social System



The Single Ability Classroom

The multi-ability classroom is different from instruction in many conventional classrooms. It helps to understand the rationale for recommended changes, if conventional classrooms are described in the purest form--what I will call Single Ability Classrooms. In practice, classrooms represent an inconsistent mixture of tasks and evaluation procedures because they are not ordinarily seen as interconnected.

In Single Ability classrooms human intellectual ability is seen as unidimensional; reading is used as an index of how "smart" the student is. The teacher is the major source of evaluation; whole class recitation and ability groups with stable membership and seatwork are the most frequent teaching techniques. In whole class recitation, the teacher's evaluation of answers as "right" or "wrong" automatically become public knowledge. In ability groups, the label is a public evaluation of competence which children understand, regardless of how the teacher tries to hide the labels. In seatwork where the students are all working at the same task, they compare themselves with each other on how fast the work is completed and on how many red marks the teacher makes on the worksheet. Still another way children learn about the teacher's evaluation is through formal grades on report cards and tests. Single Ability Classroom teachers rarely provide any evaluation other than public criticism or praise during recitation and grades and marks on tests, homework and report cards.

In addition to these features of the evaluation system, the Single Ability Classroom has important task characteristics. The nature of the schoolwork is quite uniform with most of the tasks requiring reading skills, and using paper and pencil. Curriculum activities repeatedly require the same basic skills in all content areas; they present a narrowly consistent picture of students' academic capabilities. Increasingly as the student grows older, reading skills are made the prerequisite of success in all other academic subjects. Good readers therefore do better than poorer readers in every subject, yielding uniformity in grades across subjects. There are no alternative conceptions of ability available to students in the Single Ability Classroom. Music and Art are given little emphasis; there are few intellectual tasks presented where students who are not good readers can excell on other intellectual dimensions such as reasoning, decision-making, observation or the generation of new ideas.

Effects on Students

As a result of these features of the task and evaluation system, Single Ability Classrooms produce strong agreement between the student as to where each one stands on Reading Ability. In other words, in such classrooms there should be a strong chance for status generalization based on Reading Ability; the participation and effort of poor readers is more likely to be depressed.

The evidence on the linkage between Single Ability Classrooms and a status order based on reading comes from the work of Rosenholtz and Wilson. They studied a sample of 15 classrooms: they measured instructional features with a teacher questionnaire and student agreement on status ranking with a student questionnaire. In classrooms where teachers used standardized tasks, large groups, comparative evaluation and gave very little autonomy to students in decision-making, the students showed strong agreement with each other on how everyone ranked in reading. Furthermore, the students' perceptions were in essential agreement with teachers' ranking on reading ability. In classrooms where the teachers used more small groups, individualized materials and less comparative evaluation, the agreement on where each student stood on reading ability, was not so marked (Rosenholtz and Wilson, 1980).

Simpson (1977) studied these kinds of traditional classrooms which contained multiracial student groups. He contrasted them with classrooms which did not use whole class tasks, made use of games, puzzles and other multi-media, and gave children more autonomy. In these desegregated classrooms, teachers did not see nearly as great performance deficits among Blacks and Chicanos as in traditional classrooms.

In a set of 23 racially integrated classrooms Oren and Macias find important differences in student academic self-concept and in students' sense of control of his/her own academic performance according to the evaluation practices. In these studies classrooms were characterized as to how rich and varied were the teacher's evaluation practices. Teachers who scored high on this index used individualized feedback as well as conventional marking and grading. Teachers who scored low were those who gave comparatively little feedback of any kind to students. Oren found that in classrooms with a rich feedback system, there were fewer students who reported feeling little internal control over the grades they received--i.e., they were less likely to report that their grades were due to luck or teacher bias (Oren, 1980). Macias found that the same index of evaluation practices was positively related to minority students having a higher academic self-concept (Macias, in progress).

Creating a Multi-Ability Classroom

Let me try to make the recommended changes as clear as possible. I have first introduced the theoretical strategy so that the concrete changes can be seen in the context of the goal of eliminating consistent low expectations on the part of students with low academic status.

Steps to Affect Evaluation

The following features of a classroom will help students to form a set of mixed evaluations on multiple dimensions of ability:

1. Use tasks that feature multi-media and skills other than paper-and-pencil or reading skills.
2. Use groupwork tasks defined as multi-ability.
3. Use individualization in the basic skills; use flexible grouping, rather than ability grouping.
4. Use rich feedback to the individual student which may include marks and grades but must always include talking to individual students about specific things they do well and specific skills they need to work on.
5. Provide opportunities for the low status student to perform competently in special roles such as facilitator in small groupwork.
6. Avoid automatic failure in science, math and social studies because of reading deficits.
7. Avoid individual competition; it will aggravate status problems.

These steps will help to achieve the desired goal of mixed evaluations by providing for more success opportunities for low status students. They will be more likely to do well if given the chance to work on multi-media tasks and on other tasks which do not require them to read or write in order to participate successfully. They may grasp the abstract concepts through alternative media; and they may make a contribution to a task involving reading and writing if it is defined as requiring multi-abilities and they receive the needed assistance on those parts of the task they cannot do by themselves. Individualization will provide these students with appropriate challenging tasks where it is possible for them to succeed in the basic skills. If they receive specific individualized feedback, they should come to feel that with sufficient effort they can make satisfactory progress in areas where they have had significant problems.

Even though one can set up a situation where the low status student is competent and successful in the eyes of the teacher and other students, convincing the student that his/her own competence is not at all easy. In order to acheive this clear understanding, the student must receive detailed and accurate feedback from the teacher as well as from other students. The teacher should take the time to talk to the student about his or her progress and about activities on which s/he has done particularly well or poorly. Furthermore, diffuse general evaluations of ability such as permanent ability grouping are antithetical to achieving this goal. These groupings tell the student that there are low general expectations for competence in the subject matter--exactly what you as instructor are trying to change.

The use of multi-ability tasks in and out of the groupwork setting will do much to increase the successful experience of the low status student. But the multi-ability classroom requires very careful attention to the evaluation practices of the teacher. It is essential to achieve perfect clarity on the part of the low status student that he or she does some things which are intellectually demanding very well and that there are other skills on which he or she is behind and needs to put in extra effort and work.

Increasing Participation Through Changing Task Structure

Changing the task structure of the class is not only a matter of the kinds of tasks one introduces but the ways in which the teacher makes it legitimate for students to relate to each other in the process of learning. The kinds of roles students play in the classroom and the individual or group nature of tasks and goals may also be seen as part of the class structure. Recall that in traditional classrooms students may not help each other and operate as individuals with individual accountability and reward.

Here are some steps to take in creating a suitable task structure for a Multi-Ability Classroom:

1. Make it legitimate and important for students to help one another in group settings and when working on homework and at classroom Learning Centers.
2. Use heterogeneous small groups with groupwork tasks.
    a. Define these tasks as multi-ability.
    b. Train the groups with special norms for cooperative behavior.
3. Choose academic tasks which allow different individuals to learn through different media and on different developmental levels.
4. Choose tasks which allow individuals to contribute intellectually through different kinds of abilities; visual thinking, creativity, reasoning, logic, interpersonal understanding, and organizational ability. The list is endless; one has only to think about how adult workers such as teachers use their minds rather than how students have traditionally been asked to use their minds in school settings.
5. When working on the basic skills use individualization in such a way that the student in need of remediation receives high quality supervised practice on tasks which are sufficiently challenging.

Effects of Changing the Task Structure

In the last chapter, the efforts of the Stanford Status Equalization Project to help teachers train students for small groups were described. In addition to the small group curriculum, the Stanford Support Team made a more general effort to have the six treated teachers alter their task structures by introducing more multi-ability tasks and small groups as part of their regular curriculum. They were given the definition of the Multi-Ability Curriculum and a handout on relevant changes in task and evaluation structure. The staff held a series of discussions with each classroom teacher on how their regular curriculum might be adapted to the Multi-Ability Classroom. After three months of in-service, the staff withdrew. A month later, observers entered the classroom to take a number of measures of the task structure in treated and untreated classrooms as well as the engagement and active participation of selected students.

Ahmadjian carried out a special study of 36 low-achieving students in three of the treated classrooms and in three of the control classrooms. She repeatedly observed these children at work on different days and in different subject areas of the curriculum which ordinarily required reading, such as social studies and math. Her findings on the impact of task structure differences on the behavior of low-achieving students are highly relevant to the argument that the introduction of small groups and multi-ability activities will foster active learning among low-achieving students in academically heterogeneous, racially integrated classrooms.

Systematic observations of each student for repeated, short, standardized time periods revealed that the target students were experiencing a totally different task structure in the treated as compared to the untreated classrooms. Students in classrooms receiving in-service were much more likely to be found doing multi-ability activities or in small groups. In this observation scheme, multi-ability activities were scored if students were engaged in creative writing, multi-media tasks or open discussion. Small groups were defined as pairs or 3-6 students per group. Table 1 shows the proportion of time students were observed in the different task structures of the two sets of classrooms.

Table 1

Proportion of Time Individual Students Were Observed in Various Activities and Groupings by In-Service Treatment*

Treatment	Teacher	Total Observation Time	Non Multi-Ability Activities and Large Groups or Individual Work	Multi-Ability Activities and/or Small Groups
Yes	Teacher #1	3 hrs. 15 min.	28%	72%
	Teacher #2	3 hrs. 55 min.	52%	48%
	Teacher #3	4 hrs. 33 min.	38%	62%
No	Teacher #4	3 hrs. 18 min.	92%	8%
	Teacher #5	2 hrs. 54 min.	85%	15%
	Teacher #6	2 hrs. 12 min.	70%	30%

Key:
Non Multi-Ability Activities = Academic Drill, Pencil/Paper Task
Large Groups or Individual Work = Individual, Large Group of 7 + Students
Multi-Ability Activities = Creative Writing, Multi-media Tasks, Open Discussion
Small Groups = Pairs & 3-6 Students Per Group

---

*Janis Lee Ahmadjian. "Academic Status and Reading Achievement: Modifying the Effects of the Self-Fulfilling Prophecy." Doctoral Dissertation, Stanford University, 1980.

There were marked differences in the amount of active learning on the part of these targeted students in different task structures. When the observations were classified as to the kind of grouping and activity in which the student was seen, it was clear that in small groups students were very much more likely to be talking about their work with other students. In small groups students talked on an average 1.5 times a minute while in large groups the rate was only .29 of one interaction per minute. The rate in individual work was .45 of one interaction per minute. If the student were involved in a small group doing a multi-ability activity, the probability of talking about the task rose to an average of two and one-half minutes a minute. These average rates of talking about the task are presented in Table 2. Ahmadjian's findings of the amount of time the students were disengaged from the task revealed a parallel pattern of most engagement in small groups and least engagement in seatwork. As in Berliner's 1978 study, Ahmadjian found relatively high rates of disengagement in seatwork--50% of the time (Ahmadjian, 1980; Berliner, 1978).

Table 2

Academic Interaction With Other Students: Acts Per Minute for Observations of Various Grouping Size/Activity Types*

Grouping Size/ Activity Type	$\bar{X}$	s^2	Academic Initiation With Other Students: No. of Observations
Small Group	1.54	3.33	23
Large Group	.29	.19	30
Individual	.45	.27	36
Multi-Ability Activity	.40	.61	29
Small Group/Multi-Ability Activity	2.53	10.80	16
Large Group/Non Multi-Ability Activity	.47	2.01	22

---

*Ahmadjian, Op. cit.

Small groups were comparatively rarely seen in the classrooms which did not receive in-service. However, when they were observed, they were also productive of higher rates of talking and engagement as in the treated classrooms. Although there were some examples of multi-ability tasks seen in untreated classrooms, they were not the same kind as in treated classrooms. They were either the use of films or large group discussion. Creative writing was never observed in the untreated classrooms. As a result, it is not surprising that multi-ability activities, by themselves, in these untreated classrooms were not associated with higher rates of academic participation. In contrast, in the treated classrooms, the observers scored many examples of creative writing, multi-media tasks such as manipulative academic games and open discussion. Multi-ability activities had a markedly favorable effect on engagement and active participation in treated classrooms. (See tables in appendix for the statistical analysis of these effects (Ahmadjian, 1980).

Thus, the experience of a different task structure meant higher rates of academic participation and engagement for the low-achieving child. Furthermore, the introduction of norms for equal participation in the course of training students in treated classrooms for groupwork had the impact of boosting the participation rate of low readers within the small groups. This result was described in the previous chapter (Gamero, 1980).

Will task structure affect learning? The question teachers will want to ask is whether or not increasing task engagement and talking about the task with peers will result in more learning on the part of students who are deficient in basic skills. In the case of 36 children, Ahmadjian studied, all of them were being taken out of the classrooms for instruction by a skilled reading specialist. However, the changed task structure was not really in place until March of the school year; so any favorable impact of task structure had little time to operate. The reading specialist, not knowing which children were in treated classrooms, gave slightly more favorable ratings to the progress of students in the treated classrooms, but the difference was not statistically significant and could have been due to differences between the rating of skills as of the beginning of the school year. Thus, the study did not provide a good test of this important issue, although it did show that the differences in task structure certainly did no harm to the reading progress of students in the treated classrooms.

There are numerous studies which relate active learning behavior to learning outcomes. However, they are often examining active learning behavior of students while under direct supervision of the teacher as in reading groups. Although of some relevance, these studies do not constitute a good test of peer interaction as a medium of learning. Nevertheless, these studies stress the connection between a student engaging actively in the academic work and his learning.

In an ongoing study of a math-science curriculum for bilingual classrooms (Grades 2-4), I find a strong connection between children talking to each other and working together and learning on a criterion reference test. Taking into account how the student did on the pre-test, those who talk more and work more together get higher scores on the posttest (CTBS Math Test).

In the case of this curriculum the task structure was changed by having Learning Centers with clusters of children working at each Center. Tasks were multi-ability in that they involved many different ways of understanding, manipulable materials, and a tremendous variety of skills. Directions for each Learning Center were written in English, Spanish and pictographs; not only did the tasks require understanding of these written directions but each Center required a worksheet which had to be filled out before one could progress to the next Learning Center. The problem of poor readers and inadequate language skills was solved by telling the children that they had the right to ask anyone else at their Learning Center for help. Also, everyone had the duty to assist those who asked for help. Readers assisted non-readers in becoming oriented to the tasks which involved manipulation, measurement, drawing, computing, hypothesizing and many other scientific skills. The Learning Center tasks were constructed so that children who were functioning at a lower level of cognitive development could learn by carrying out the activities at a simpler level. These tasks are an excellent example of multi-ability activities.

Returning to Figure I for a moment, I argued that changing the task structure would change the effort and participation of the student, and would therefore have an impact on learning. The relationship between the children working together and talking to each other and learning is strong evidence for the proposed linkage. However, it is critical to point out that this learning took place under the conditions of beautifully prepared learning materials. It should be clear that I am not advocating Learning Centers as a magic substitute for a well-conceptualized and prepared curriculum.[1] Instead, I am pointing out that shifting toward small groups and cooperative learning relationships in conjunction with careful preparation of multi-ability tasks will solve many of the motivational problems of poor achievers and engage them in effective active learning behavior.

These changes in task structure require basic skills from the teacher in management of the classroom. Teachers who have not solved the problem of gaining compliance from their students when they give directions; teachers who are reluctant to delegate authority to students to carry out tasks; or teachers who find it difficult to get their classrooms organized efficiently and quickly---all these teachers will have problems following the recommendations on task structure. They will need to work on these more basic teaching skills in order to run a Multi-Ability Classroom. The work of the Stanford Support Group suggests that with some help from an experienced teacher (not necessarily an outside expert), a person can rapidly improve these basic teaching skills.

---

[1] This curriculum is called Finding Out/Descrubriemento and was developed by E. De Avila. The research cited is part of a project supported by the National Science Foundation.

Incorporating Status Treatments

For maximum effectiveness on learning, the teacher must keep in mind that having the students interact on collective tasks will activate status problems. This will hold, even if the tasks are as varied as those in the science curriculum just described. Unless the teacher stops to explain that reading is only one of the necessary skills for success at these Learning Centers, I would expect the better readers to dominate in the cooperative interactions between the students.

The weaker student, although much better off with the assistance of his/her classmates than without it, could still do better, if the teacher stopped to give a multi-ability definition of the tasks at each Learning Center. Furthermore, as long as reading and math continue to be taught in conventional ability groups, one would expect no transfer of the improved expectations for competence to these academic subjects. Direct benefits to reading skills would only be derived from active practice in learning to read the materials at the Learning Center with peer assistance.

In addition to multi-ability treatments, the use of cooperative norms and different roles for different students will do much to provide new success experiences for low achieving students, thus leading to the elimination of low general expectations for competence on the part of these students.

To sum it up, the key point is that changes in the evaluation practices should go hand in hand with changes in the task structure. In that way, the teacher will generate the motivation to work harder at learning tasks in basic skills and in other academic subjects. At the same time, the teacher will achieve equal status interaction between students who come from different racial and cultural backgrounds. This, in turn, will weaken racist stereotypes and will instruct the students in how to work together.

A Word About Power

I have written about small groups in classrooms as if work relationships between children took place in a vacuum. Actually, they are very much affected by informal social relationships between the children and by the organization of the school. The word "power" is a good way to characterize these other kinds of relationships which enter into the student's work behavior. Some students are able to get other students to do what they want through interpersonal influence.

In many classrooms the most influential children are also the best students. About the only exception are the outstanding athletes, who may or may not be good students, but who are often seen as influential by classmates. When this is the case, a teacher will not notice that athletes will tend to be very active and influential in classroom groupwork, whether or not they have high academic status.

In some classrooms, there is no relationship between academic status ranking and influence. In this case, the teacher will observe two kinds of children who are active and influential in work groups--those who have high academic status and those who are influential on other grounds. In these classrooms, socially powerful children are often seen as a threat to the authority of the classroom teacher. They are quite capable of creating problems for the teacher by their ability to exert influence for unacceptable behavior.

One of the unexpected bonuses in groupwork is the effect on these kinds of students. They are virtually "coopted" by the use of groups working on academic tasks. Since the medium is social, they will quickly engage themselves in task-related interaction and become deeply involved in academic work.

In the integrated school where the Stanford Support Group tried to install multi-ability classrooms, careful analysis of the data revealed that there were many Black students who were poor readers but whose ideas in group discussion were highly valued; they were seen as competent. In these classrooms with a wide range of social class and academic skills, alternative status characteristics to reading ability seemed to be operating right alongside the reading status characteristic. Analysis of behavior on collective tasks revealed the academic status order and an alternative status characteristic operating simultaneously and in opposite directions. The reading characteristic was more likely to boost the influence of White students; while the alternative status characteristic was boosting the influence of Black students (Cohen, 1979)

What was the source of the social influence of Black students in this integrated setting? This question raises the issue of how the racial composition of the school, the presence of minority members on the faculty and the presence of strong multi-cultural programs come to affect work relations between students in the classroom. In an analysis of many integrated settings, Iadacola demonstrated a strong correlation between how dominant the White students were over minority students on collective tasks and these organizational variables. In schools where the minority students represented a larger proportion of the student population, where minorities were well represented on the faculty, and where there were multi-cultural programs, the Whites were less dominant in groupwork than in schools without these characteristics (Iadicola, 1979).

Students are indeed affected by the power and authority relationships of the adults around them. In the school studied by the Stanford Status Equalization Project, the Black adults and Black culture played an official and powerful role. This was reflected in the students in that both Whites and Blacks were more likely to see Blacks as influential. Influential Blacks were also seen as having good ideas in group tasks and were active and influential in the small group academic setting.

Teachers are often unaware of how the relationships between adults in the school models behavior for students. In one experiment on Expectation Training, Robbins found that if the Anglos dominated the administration of the treatment with Chicano adults playing subordinate roles, Expectation Training was ineffective in persuading Chicanos to be more active and influential in interaction with Anglos. If Chicano and Anglo adults modeled equal status behavior as they ran the experiment, Expectation Training was successful in producing eaual status behavior among the students (Robbins, 1977).

What does this mean for the classroom teacher? If the school is one with a very small number of minority students and no representation on the faculty of minorities, it may indeed be very difficult to treat the tendency of minority students to be low participators. If they have little informal social influence, it may become very difficult to persuade them that it is legitimate for them to speak up and argue with their Anglo classmates.

Elsewhere I have recommended against desegregation plans which result in this pattern (Cohen, 1980). However, the teacher typically has no control over these variables with the exception of the use of multi-cultural materials. In addition to this approach, one sensible strategy is to empower these students by giving them special roles to play, such as group facilitators. You can use your authority as a teacher to delegate to them the right to direct the behavior of their classmates in a specific role.

In the bilingual setting, it is often the case that the Anglo teacher has a Spanish-speaking teacher aide. If the teacher is constantly seen directing the behavior of this aide, it will communicate to the Spanish speaking children that they are powerless in this social setting. It therefore becomes important for the teacher and aide to function as an equal status team in front of the students; many teachers and aides do indeed work in this manner.

If the school is one where there is a wide range of academic skills but the minority students who are low readers tend to be the most socially powerful students, then the recommendations of the multi-ability classroom are ideally suited to the setting. These techniques will coopt the influential students, persuading them to apply their talents to academic arenas. At the same time, careful training in group process skills, which we have recommended, will provide excellent training for harmonious, equal status interracial relations.

Conclusion

This book has moved from the simplest applications of groupwork in designing a lesson or unit with a specific teaching objective to the complete restructuring involved in the Multi-Ability Classroom. As much as a set of techniques, I have been describing a new way of looking at the design of learning tasks in light of what we know about classroom social structure.

Some of the recommendations can be put to use with very little difficulty--only the time necessary to do the advance planning and the post-class evaluation. Others require careful choice of curricular materials, a high level of teacher management skills and the requisite skill in individualization and feedback to students. It is quite possible to start with the easiest tasks recommended and to move on as skill is acquired to the more difficult.

I encourage the teacher to be experimental in weaving these general principles in with his/her own approach to teaching. However, the task is really better accomplished with the help of a colleague. The intellectual task is not an easy one; it will go better when there is a colleague with whom one can discuss strategies, and evaluate results. It only takes one pair of teachers or a teacher and a resource or specialist teacher to put groupwork into operation. The very process of designing and carrying out some of the ideas in this volume will turn out to be highly rewarding for the teacher. Groupwork, when properly done, is entirely too good to be restricted to students--it will have the same benefits for the staff!

Appendix

Chapter X

Analysis of Variance

Number of Academic Initiations With Other Students Classroom Type and Activity Type

Source	S.S.	D.F.	M.S.	F	
Main Effects	375.58	3	125.19	7.60	****
Classroom Type	92.70	1	92.70	5.63	**
Activity Type	155.56	2	77.78	4.73	**
Classroom Type x Activity Type	174.06	2	87.03	5.29	**
Residual	6256.04	380	16.46		

Key: Level of Significance

* = P <.05 ** = p <.01 *** = p <.001

References

Aaronson, E. The Jigsaw Classroom. Beverly Hills, CA:Sage Publications, 1978.

Aaronson, E., Bridgeman, D., and Geffner, R. "Interdependent Interactions and Pro-social Behavior." Journal of Research Development in Education, 1978, 12, 16-29.

Abelon, D.L. "Science, Technology and the Courts." Science, Vol. 208, No. 4445, 1980.

Ahmadjian, J. Academic Status and Reading Achievement: Modifying the Effects of the Self-Fulfilling Prophecy. Unpublished doctoral dissertation, Stanford University, 1980.

Allport, S.W. The Nature of Prejudice. Cambridge, Mass.: Addison-Wesley, 1954.

Asch, S.E. Social Psychology. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1952.

Bandura, A. Principles of Behavior Modifications. New York: Holt, Rinehart & Winston, Inc., 1969.

Berliner, D., Fisher, C. Filby, N., Marliave, R., Cahen, L., Dishaw, M., Moore, J. Beginning Teacher Evaluation Study--Teaching Behaviors, Academic Learning Time and Student Achievement: Final Report of Phase II-B. San Francisco, CA: Far West Laboratory, 1978.

Berger, J., Conner, T., & McKeown, W. "Evaluations and the Formation and Maintenance of Performance Expectations." In Berger, Conner, & Fisek (Eds.) Expectation States Theory: A Theoretical Research Program. Cambridge Mass: Winthrop Publications, 1974, pp. 27-52.

Blaney, N.T., Stephen, S., Rosenfield, D., Aronson, E. & Sikes, J. "Interdependence in the Classroom: A Field Study." Journal of Educational Psychology, 1977, 69(2), 121-128.

Bloom, J.R. & Schuncke, G.M. "The Effect of a Cooperative Curriculum Experience on Choice of Task Organization." Journal of Experimental Education, 1979.

Breer, P.E. & Locke, E.A. Task Experience as a Source of Attitudes. Homewood, Ill.:Dorsey Press, 1965.

Carter, L.F., Haythorn, W. & Howell, M. "A Further Investigation of the Criteria of Leadership." In Hare, Borgatta & Bales (Ed.) Small Groups: Studies in Social Interaction, revised edition, New York: Alfred A. Knopf 1965.

Cohen, E. "Interracial Interaction Disability." Human Relations, 25, 1972, 9-24.

Cohen, E., Lockheed, M., & Lohman, M. "Center for Interracial Cooperation: A Field Experiment." Sociology of Education, 1976, 49.

Cohen, E. "Status Equalization in the Desegregated School." Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, April, 1979.

Cohen, E. & Sharan, S. "Modifying the Status Relations in Israeli Youth: An Application of Expectation States Theory." Journal of Cross-Cultural Psychology, Vol. II, No. 3, September, 1980.

Deutsch, M. "A Theory of Cooperation and Competition." Human Relations, 1949, 2, 129-152.

Deutsch, M. "The Effects of Cooperation and Competition Upon Group Process." In D. Cartwright & A. Zander (Eds.) Group Dynamics. New York:Harper & Row, 1968, 461-482.

Cook, T. Producing Equal Status Interaction Between Indian and White Boys in British Columbia: An Application of Expectation Training. Unpublished doctoral dissertation, Stanford University, 1974.

Epstein, C. "Affective Subjects in the Classroom: Exploring Race, Sex and Drugs." Scranton, Pa.: Intext Educational Publication, 1972.

Gamero, Dina del Carmen. Evaluation of a Small Group Curriculum. Unpublished doctoral dissertation, Stanford University, 1981.

Hall, J. "Decisions, Decisions, Decisions." Psychology Today, 1971,5.

Hess, R.D., & Takanishi, R. The Relationship of Teacher Behavior and School Characteristics to Student Engagement. Stanford Center for Research and Development in Teaching Technical Report #42, November 1974, (ED 098225).

Hoffman, D. & Cohen, E. "An Exploratory Study to Determine the Effects of Generalized Academic Performance Expectations Upon the Activity and Influence of Students Engaged in a Group Simulation Game. 1972 (paper presented at the American Educational Research Association in Chicago, Ill.)

Iadicola, P. Schooling and Social Power: A Presentation of a Weberian Conflict Model of the School. Unpublished doctoral dissertation, University of California, Riverside, 1979.

Inhelder, B., Sinclair, H. & Bovet, M. Learning and Development of Cognition, Cambridge, Mass.: Harvard University Press, 1974.

Johnson, D. & Maruyama, G. et al. "The Effects of Cooperation, Competitive and Individualistic Goal Structure on Achievement: A Meta Analysis." Psychological Bulletin, in press.

Lucker, G., Rosenfield, D., Sikes, J. & Aronson, E. "Performance in the Interdependent Classroom: A Field Study." American Educational Research Journal, 1976, 13, 115-123.

Macias, M. The Social Organization of Classrooms and the Impact on the Academic Self-Concept of Multi-Cultural Students. Unpublished doctoral dissertation, Stanford University, in progress.

Morris, R. A Normative Intervention to Equalize Participation in Task-Oriented Groups. Unpublished doctoral dissertation, Stanford University, 1977.

Murray, F. "Acquistions of Conservation Through Social Interaction." Developmental Psychology, 1972, 6, 1-6.

Oren, D. Classroom Structure and Attributions: The Effects of Structural Characteristics on Attritutional Tendencies. Unpublished doctoral dissertation, Stanford University, 1980.

Perez, T. R.L. In-Service Teacher Education: An Organizational Model for the School Change. Unpublished doctoral dissertation, Stanford University, 1979.

Pfeiffer, J. & Jones, J.E. A Handbook of Structural Experiences for Human Relations Training. Vol. 1, Iowa City: University Associated Press, 1970.

Piaget, J. Play, Dreams and Imitation in Childhood. W. W. Norton, 1951.

Piaget, J. Science of Education and the Psychology of the Child. New York, Orion Press, 1970.

Robbins, A. Fostering Equal-Status Interaction Through the Establishment of Consistent Staff Behaviors and Appropriate Situational Norms. Unpublished doctoral dissertation, Stanford University, 1977.

Rosenholtz, S. J. The Multiple Abilities Curriculum: An Intervention Against the Self-Fulfilling Prophecy. Unpublished doctoral dissertation, Stanford University, 1977.

Rosenholtz, S.J. & Wilson, B. "The Effect of Classroom Structure on shared Perceptions of Ability." American Educational Research Journal, 1980.

Schofield, J.W. & Sagar, H.A. "The Social Context of Learning in an Interracial School." In R. Rist (Ed.) Desegregated Schools: Appraisals of an American Experiment, Academic Press, New York, 1979, 155-159.

Schofield, J.W. & Sagar, H.A."Peer Interaction Patterns in an Integrated Middle School." Sociometry, 40, 130-138.

Schmuck, R. & Schmuck, P. Group Processes in the Classroom. William C. Brown Company, Dubuque, Iowa, 1979, 2nd edition.

Sharan, S. "Cooperative Learning in Small Groups: Recent Methods and Effects on Achievement, Attitudes, and Ethnic Relations." Review of Educational Research, 1980, 50, 241-271.

Sharan, S. & Hertz-Lazarowitz, R. "A Group-Investigation Method of Cooperative Learning in the Classroom." In Sharan, Hare, Webb & Lazarowitz (eds.) Contributions to the Study of Cooperation in Education. Provo, Utah: Brigham Young University Press, 1980.

Sharan, S., Hertz-Lazarowitz, R. & Ackerman, Z. "Academic Achievement of Elementary School Children in Small Group Versus Whole-Class Instruction." Journal of Experimental Education, 1980, 48(2).

Sharan, S. and Sharan Y. Small-Group Teaching. Educational Technology Publications, Englewood Cliffs, New Jersey, 1976.

Sherif, M. The Psychology of Group Norms. New York: Harper & Row, 1936.

Simpson, C. Classroom Structure and the Reality of Ability Differences. Paper presented at the annual meeting of Pacific Sociological Association, 1977.

Slavin, R. "Cooperative Learning." Review of Educational Research, 1980, 50, 315-392.

Slavin, R. "How Student Learning Teams Can Integrate the Desegregeated Classroom." Integrated Education, 1977, 15, 56-58.

Slavin, R. "Effects of Biracial Learning Teams on Cross-Racial Friendships." Journal of Educational Psychology, 1979, 71, 381-387.

Slavin, R. & Oickle, E. Effects of Learning Teams on Student Achievement and Race Relations in a Desegregated Middle School. Paper presented at the American Educational Association, Boston, Mass., 1980.

Stallings, J. et al. A Study of Basic Reading Skills Taught in Secondary Schools. Menlo Park, CA: Stanford Research Institute International, 1978.

Stulac, J. The Self Fulfilling-Prophecy: Modifying the Effects of a Unidimensional Perception of Academic Competence in Task-Oriented Groups. Unpublished doctoral dissertation, Stanford University, 1975.

Strodtbeck, F.L., James, R.M. & Hawkins, C. "Social Status in Jury Deliberations." American Sociological Review, 1957, 22.

Thomas, E.J. "Effects of Facilitative Role Interdependence on Group Functioning." Human Relations, 1957, 10, 347-366.

Torrance, E.P. "Some Consequences of Power Differences on Decision Making in Permanent and Temporary Three-Man Groups." In A.P. Hare, E. F. Borgatta, & R.F. Bales (Eds.) Small Groups: Studies in Social Interaction, New York: Alfred A. Knopf, 1965, pp. 600-609.

Webster, M. & Driskell, J.E. "Status Generalization: A Review and Some New Data." American Sociological Review, 1978, 43, 220-236.

Weigel, R.H., Wiser, P.L., & Cook, E. "The Impact of Cooperative Learning Experiences on Cross Ethnic Relations and Attitudes." Journal of Social Issues, 1975, 31, 1, 219-245.

Wilcox, M. Comparison of Elementary School Children's Interaction in Teacher-Led and Student-Led Small Groups. Unpublished doctoral dissertation, Stanford University, 1972.

Zander, A. & Van Egmond, E. "Relationship of Intelligence and Social Power to the Interpersonal Behavior of Children." Journal of Educational Psychology, 1958, 49, 257-268.

APPENDIX A

SMALL GROUP TASKS

STANFORD UNIVERSITY
School of Education
Status Equalization Project

FALLOUT SHELTER!
Small Group Task

The object of this game is to select seven persons to go into the fallout shelter. You have just been alerted that a neutron bomb is headed for the United States and the United States has just released a neutron bomb in retaliation. Therefore, it is very likely the end of the world. Your group must decide which seven persons will go into the fallout shelter. Remember, only seven persons can go into the shelter. You must have agrement of the entire group before a selection can be made.

1. a 30 year old male symphony orchestra violin player
2. a 67 year old male minister
3. a 23 year old engineer and his 21 year old wife (they refuse to be separated)
4. a 40 year old policeman who refuses to be separated from his gun
5. an 11 year old student (male) from Wordsworth School
6. a 25 year old male high school dropout; recently arrested for armed robbery
7. a 32 year old female 6th grade teacher
8. a 40 year old female doctor (medical)
9. a 50 year old female artist and sculptor
10. a 25 year old male poet
11. a one year old female child

Rank order the following ten people as to how much you would like to have them as friends. Number 1 would be the friend you would like best and number 10 would be the friend you would like least. There must be total agreement on the rankings within your group.

1. (cook) A student who cooks dinner two nights a week for two old people who are sick in bed.
2. (appeaser) A student who witnessed a friend taking money from another friend's wallet, tells neither friend, but replaces the moneh himself/herself.
3. (bossy) A fifth grader who always bosses people around; on the playground as well as in the classroom.
4. (athlete) A Wordsworth student who is a star athlete and only has friends who are as good at athletics as he is.
5. (popular) A student who is very popular because he/she makes everyone feel good. He/she never expresses his own feelings or opinions if they could cause an argument.
6. (good-timer) A student who jokes all the time and plays practical jokes on other s for the fun of it.
7. (snob) A Wordswoth student who tells you that you should not be friends with someone else because their father is in jail.
8. (prude) A student who makes fun of other students who can't do well in the classroom.
9. (withdrawn) A student who is very quiet, rarely talks to anyone yet will hold an interesting conversation when someone else starts talking to him/her.
10. (fighter) A fifth grader who picks fights with people over nothing worth fighting about.

"Alligator River"

Once there was a girl named Abigail who was in love with a boy named Gregory. Gregory had an unfortunate accident and broke his glasses. Abigail, being a true friend, volunteered to take them to be repaired. But the repair shop was across the river, and during a flash flood the bridge was washed away. Poor Gregory could see nothing without his glasses, so Abigail was desperate to get across the river to the repair shop. While she was standing forlornly on the bank of the river, clutching the broken glasses in her hands, a boy named Sinbad glided by in a rowboat.

She asked Sinbad if he would take her across. He agree to on the condition that while she was having the glasses repaired, she would go to a nearby store and steal a transistor radio that he had been wanting. Abigail refused to do this and went to see a friend named Ivan who had a boat.

When Abigail told Ivan her problem, he said he was too busy to help her out and didn't want to be involved. Abigail, feeling that she had no other choice, returned to Sinbad and told him she would agree to his plan.

When Abigail returned the repaired glasses to Gregory, she told him what she had had to do. Gregory was so mad at what she had done he told her that he never wanted to see her again.

Abigail, upset, turned to Slug with her tale of woe. Slug was sorry for Abigail that he promised her he would get even with Gregory. They went to the school playground where Gregory was playing ball and Abigail watched happily while Slug beat Gregory up and broke his glasses.

Rank these characters from "best" to "worst": Abigail, Gregory, Sinbad, Ivan, Slug

Give reasons for your decisions

"Lost on the Moon" Instructions

For this activity you are to imagine the following: you are an astronaut piloting your spaceship to the moon. (CRASH) Your spaceship has just crash-landed on the moon. You were scheduled to meet up with the mother ship which is 200 miles away. Both you and the mother ship are on the lighted side of the moon. The rough landing has runied your ship except for the fifteen items shown on these cards (show a card). The survival of your crew depends upon reaching the mother ship. In order to do this you must pick the most important items available for the 200 mile trip. Your task is to rank the fifteen items according to most important to least important. That is, put the item you would value most first, the next most important item second, and so on. As you are doing this, try to think of good reasons for your ordering. Remember, there may be many uses for an item; it doesn't necessarily have to be used for its usual or intended purpose.

Here are the fiften items:

Box of matches
Food concentrate
Fifty feet of nylon rope
Parachute silk
Solar-powered heating unit
Two 45 calibre pistols
Steller map of the moon's constellation
Self-inflated raft
Magnetic compass
Five gallons of water
Signal flares
First-aid kit
Solar-powered walkie-talkie
One case of powdered milk
Two tanks of oxygen